# CHAPTER - 1

## INTRODUCTION AND BACKGROUND

Status of watershed programme and approved plan by Steering committee, Govt. of India and status of previous Detailed Project Reports for Banda district, Deptt. of Agriculture, Uttar Pradesh is given in following Tables 1.1 and 1.2.

**Table 1.1: Status of watershed programme District- Mahoba**

| Details | No. | Area ( ha.) |
|---|---|---|
| Total Micro watersheds in the district | 634 | 446000 |
| Workable Micro Watersheds | 590 | 415061 |
| Micro Watersheds already treated (partially) by Deptt of Agriculture, Dist.- Banda Uttar Pradesh | 44 | 30939 |
| Micro Watersheds (MWS) available for treatment (begning IWMP in the district) | 78 | 47400 |

**Table 1.2: Approved plan (PPRs) by Steering Committee (SC)/Govt. of India, District- Banda**

| Year | Project | MWS | Area (Treatable) (ha) | Project Cost (Rs. Lakh) | Name of PIA | Date of Sanction by S.C. Got. Of India |
|---|---|---|---|---|---|---|
| 2011-12 | IWMP-X | 6 | 4835 | 580.2 | BSA (Agri), Banda-I | 26.09.2011 |
| 2011-12 | IWMP-XI | 10 | 3727 | 447.24 | BSA (Agri), Banda-I | -do- |
| 2011-12 | IWMP-XIII | 9 | 5538 | 664.56 | BSA (Agri), Rastriya Jalagam, Banda | -do- |
| 2011-12 | IWMP-XV | 8 | 4436 | 532.32 | BSA (Agri), Banda-I | -do- |
| 2011-12 | IWMP-XVI | 8 | 4436 | 532.32 | BSA (Agri), Rastriya Jalagam, Banda | -do- |
| **Total** | | **87** | **34277.90** | **4376.86** | | |

## 1.1 Project Background

Integrated Watershed Management Programme-XI comprises ten micro-watersheds namely: Narjita (2ClB2b3a), Gauri Kalan (2ClB2b2a), Gadariya (2C1B2c1d), Birkhera (2C1B2c1c), Jaspura (2C1B2b1b), Terha (2C1B2c1e), Bhatha (2C1B2a3h), Dhundh Pur (2C1B2c2b), Madauli Khurd (2C1B2n1b) and Kiswahi (2C1B2n1e). Watershed project is situated in Visanda block of district Banda and spread over in 25 villages of 10 gram panchayat. The total geographical area of the IWMP-XI is 6788.50 ha due to same area treated earlier however treatable area limited to 3727.00 ha is treatable under Integrated Watershed Management Programme (IWMP-XI).

**Table 1.1: Details of IWMP-XI for which this DPR is Prepared**

| Watershed project | Micro Watersheds (MWS) detail | Micro watersheds code | Treatable Area (ha) | Treated Area (ha) | Name of Watershed in which MWS is falling (River / Nala name) |
|---|---|---|---|---|---|
| IWMP-XI | Narjita | 2ClB2b3a | 478.00 | 83.25 | Yamuna River |
| | Gauri Kalan | 2ClB2b2a | 326.00 | 57.33 | -do- |
| | Gadariya | 2C1B2c1d | 145.00 | 18.60 | -do- |
| | Birkhera | 2C1B2c1c | 126.00 | 621.59 | -do- |
| | Jaspura | 2C1B2b1b | 556.00 | 96.42 | -do- |
| | Terha | 2C1B2c1e | 636.00 | 530.04 | -do- |
| | Bhatha | 2C1B2a3h | 482.00 | 83.78 | -do- |
| | Dhundh Pur | 2C1B2c2b | 0.00 | 151.04 | -do- |
| | Madauli Khurd | 2C1B2n1b | 478.00 | 83.33 | -do- |
| | Kiswahi | 2C1B2n1e | 500.00 | 114.18 | -do- |
| **Total** | | | **3727.00** | **1839.57** | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

## 1.2 Need and Scope for Watershed Development

Bundelkhand region had been in a grip of severe drought continuously from 2004 to 2007. In the region, more than 85 per cent of open wells were dried up due to deficit rainfall during drought. Cattle were abandoned due to shortage of water and fodder. Most part of the region was dependent on drinking water supply through tanker. Therefore, management of natural resources on watershed basis is urgent need of the region. Watershed project was selected with following long term objectives:

- To optimize productivity of the land
- To restore ecological balance in degraded and fragile eco-system
- To narrow down the disparity between rainfed and irrigated areas
- To create sustained employment opportunities

## 1.3 Weightage for selection of Watershed

Watershed project was selected on the basis of criteria mentioned in Table 1.2 and composite ranking was developed on the basis of these parameters. The seventeen criteria were taken with total of 205 weightage points. The criterion taken are availability of drinking water, irrigation, degree of soil erosion, water holding capacity, area under rainfed agriculture, status of field bund/contour bund / graded bund, presence of hard rock below the land, options for livelihood, percentage of small and marginal farmers, degraded land, ground water status, status of technical knowledge for improved farming systems, weather conditions, poverty index (% of poor population), virginity of land, productivity potential of land and soil organic carbon status. The weightage for project is about 85.37 per cent (Table 1.3).

**Table 1.2: Criteria and weightage for selection of watershed**

| S. No. | Criteria | Maximum Score | Range & Score | | | |
|---|---|---|---|---|---|---|
| 1 | Drinking water | 15 | **Very poor** Dependence on water supply through tanker (15) | **Poor** Partial availability within the periphery of 3-4 km (10) | **Good** Round the year availability within the periphery of 3-4 km (5) | **Very Good** Round the year availability in watershed (0) |
| 2 | Irrigation | 10 | No irrigation (10) | Life saving irrigation (7.5) | Partial life saving irrigation (5) | Fully covered (0) |
| 3 | Degree of soil erosion | 10 | Severe (10) | Medium (7.5) | Low (5) | No erosion (0) |
| 4 | Water holding capacity | 10 | Very poor (10) | Poor (7.5) | Good (5) | Very Good (0) |
| 5 | Area under rainfed agriculture | 15 | More than 90% (15) | 80 to 90 % (10) | 70 to 80 % (5) | Below 70% (Reject) (0) |
| 6 | Status of field bund/contour bund / graded bund | 10 | Below 20 % (10) | 50 to 20 % (7.5) | 80 to 50 (5) | Above 80% (2.5) |
| 7 | Presence of hard rock below the land | 15 | Hard rock starts from 5 to 20 feet (15) | Hard rock starts from 21 to 50 feet (10) | Hard rock starts from 51 to 100 feet (5) | Deep soil depth (0) |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8 | Options for livelihood | 10 | Very poor (10) | Poor (7.5) | Good (5) | Very Good (0) |
| 9 | % of small and marginal farmers | 10 | More than 80% (10) | 50 to 80 % (5) | Less than 50% (3) | |
| 10 | Degraded land | 15 | High above 50% (15) | Medium 25 to 50% (10) | Low less than 10 – 25 % (5) | Very low Less than 10% (0) |
| 11 | Ground water status | 10 | Very poor (10) | Poor (7.5) | Good (5) | Very Good (0) |
| 12 | Status of Technical Knowledge for improved farming systems | 10 | Very poor (10) | Poor (7.5) | Good (5) | Very Good (0) |
| 13 | Weather condition | 15 | Uncertain weather condition / Continuous drought for three years (15) | Drought comes one in five years (10) | Drought comes one in ten years (5) | Normal weather condition (0) |
| 14 | Poverty index (% of poor population) | 10 | Above 80% (10) | 80 to 50 (7.5) | 50 to 20 % (5) | Below 20 % (2.5) |
| 15 | Virginity (No treatment /intervention in last five years) | 10 | Above 80% (10) | 80 to 50 (7.5) | 50 to 20 % (5) | Below 20 % (2.5) |
| 16 | Productivity potential of land | 15 | Lands with low production & where productivity can be significantly enhanced with reasonable efforts (15) | Lands with moderate production & where productivity can be enhanced with reasonable efforts (10) | Lands with high production & where productivity can be marginally enhanced with reasonable efforts (5) | - |
| 17 | Organic carbon status | 15 | Very low (15) | Low (10) | Medium (5) | Normal (0) |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 1.3: Weightage of the project**

| S. No. | Criteria | Weightage points |
|---|---|---|
| 1 | Drinking water | 10 |
| 2 | Irrigation | 10 |
| 3 | Degree of soil erosion | 10 |
| 4 | Water holding capacity | 10 |
| 5 | Area under rainfed agriculture | 10 |
| 6 | Status of field bund/contour bund / graded bund | 10 |
| 7 | Presence of hard rock below the land | 10 |
| 8 | Options for livelihood | 10 |
| 9 | % of small and marginal farmers | 10 |
| 10 | Degraded land | 15 |
| 11 | Ground water status | 10 |
| 12 | Status of Technical Knowledge for improved farming systems | 10 |
| 13 | Weather condition | 10 |
| 14 | Poverty index (% of poor population) | 10 |
| 15 | Virginity | 10 |
| 16 | Productivity potential of land | 10 |
| 17 | Organic carbon status | 10 |
| | **Total Weightage (Out of total 205)** | **175** |
| | **Weightage Percentage** | **85.37** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

## 1.4 Details of ongoing watershed programme

Presently, no watershed development programme is going on in the micro-watershed**.** There is no on going watershed management program/ activities on the micro watershed.

# CHAPTER - 2

## GENERAL DESCRIPTION OF PROJECT AREA

### 2.1 Location:

The micro-watersheds of IWMP-XI is located in Visanda block of Banda district. It is about 30 km. from Banda to Visanda road. Location (lat/long), Gram Panchayat, villages and its geographical area for each micro-watershed are depicted in Table 2.1. Total area of the project is 6788.50 ha, out of which 3727.00 ha is treatable. The geographical area of micro-watershed varies between of 184.20 to 1422.00 ha.

**Table 2.1: Micro-watershed wise details of villages and geographical area of IWMP- XI**

| Sl. No. | Name of micro watershed with Code | Names of villages | Longitude | Latitude | Name of Block | Area of village included in MWS (Geographical) | Details of important /approach road with distance km |
|---|---|---|---|---|---|---|---|
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | $80^o$ 17' 30.0"- $80^o$ 19' 30.0" | $25^o$ 48' 0.0"- $25^o$ 49' 30.0" | Visanda | 684.45 | Banda to Visanda road |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | $80^o$ 19' 30.0"- $80^o$ 21' 0.0" | $25^o$ 48' 0.0"- $25^o$ 49' 30.0" | Visanda | 467.48 | Banda to Visanda road |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | $80^o$ 15' 0.0"- $80^o$ 17' 0.0" | $25^o$ 48' 0.0"- $25^o$ 50' 30.0" | Visanda | 199.51 | |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | $80^o$ 14' 0.0"- $80^o$ 17' 30.0" | $25^o$ 47' 0.0"- $25^o$ 49' 0.0" | Visanda | 911.69 | Banda to Visanda road |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, | $80^o$ 21' 0.0"- $80^o$ 23' 0.0" | $25^o$ 46' 30.0"- $25^o$ 49' 0.0" | Visanda | 795.64 | Banda to Visanda road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Amara | | | | | |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | $80^o$ 15’ 0.0”- $80^o$ 16’ 0.0” | $25^o$ 48’ 0.0”- $25^o$ 49’ 30.0” | Visanda | 1422.00 | Banda to Visanda road |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | $80^o$ 23’ 30.0”- $80^o$ 25’ 30.0” | $25^o$ 46’ 0.0”- $25^o$ 48’ 0.0” | Visanda | 689.98 | Banda to Visanda road |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | $80^o$ 23’ 30.0”- $80^o$ 25’ 30.0” | $25^o$ 46’ 0.0”- $25^o$ 48’ 0.0” | Visanda | 184.20 | Banda to Visanda road |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | $80^o$ 20’ 0.0”- $80^o$ 22’ 30.0” | $25^o$ 45’ 0.0”- $25^o$ 47’ 0.0” | Visanda | 684.55 | Banda to Visanda road |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | $80^o$ 18’ 0.0”- $80^o$ 21’ 30.0” | $25^o$ 44’ 0.0”- $25^o$ 46’ 0.0” | Visanda | 749.00 | Banda to Visanda road |
| | **Total** | | | | | **6788.50** | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

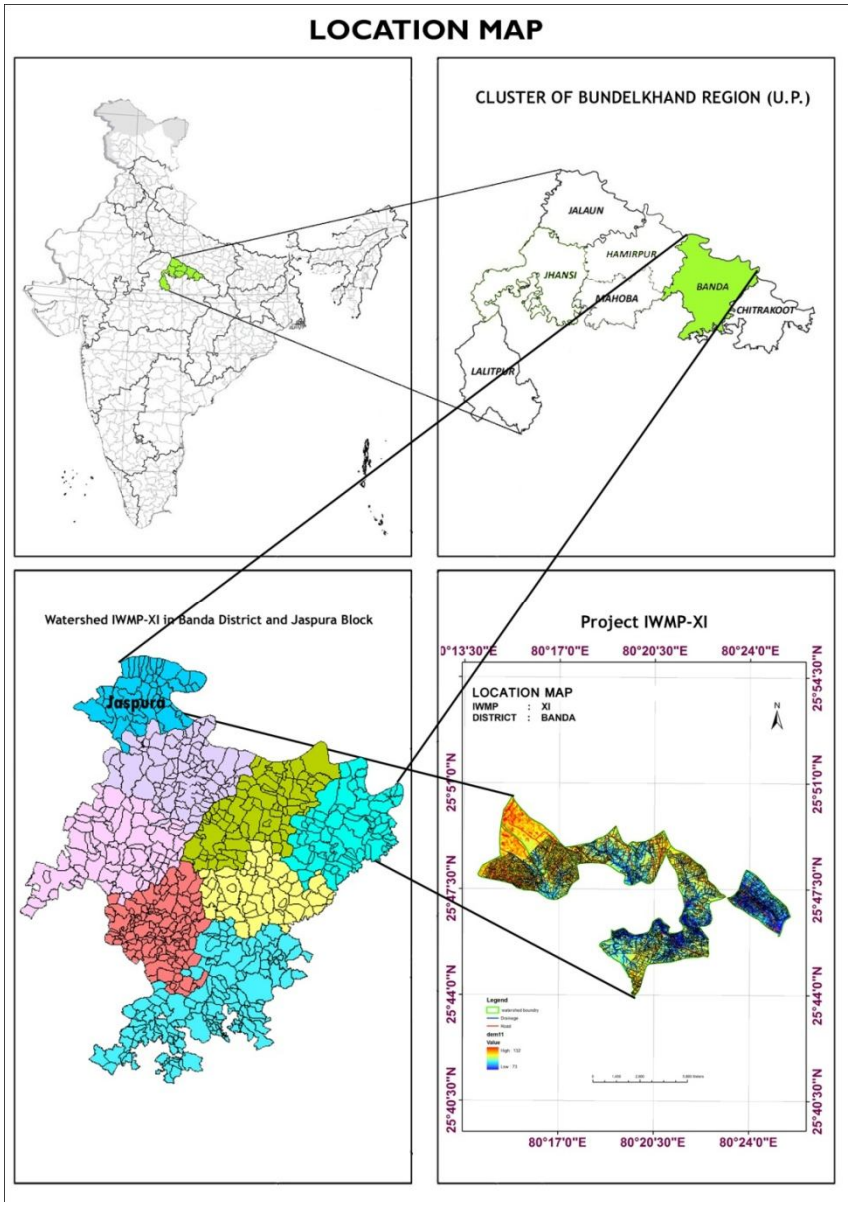


Fig 2.1 Location map of IWMP-XI

**2.2 Area and Landuse:** Each micro-watershed covers partially or fully lands of many village. Details of various categories of land were estimated on the basis of villages, MWS area, PRA meetings and other source such as village meetings. Village wise detailed information on type of land is depicted in Table 2.2. The total culturable land of the project is 5566.57 ha, out of which 1168.98 (21.00%) ha land is under life saving irrigation mainly by means of open shallow dug wells. The cultivable rainfed, temporary and permanent wastelands are about 74.00, 3.70 and 1.3 per cent, respectively, of culturable land of the project.

**Table 2.2: Details of land resources in IWMP-XI of Banda district**

| Sl. No. | Name of MWS with code | Name of Village | Cultivated rainfed area | Cultivated irrigated area | Uncultivated wasteland/ fallow | | Pvt. Agri. Land | | | | Forest Land | Community land | Others | Total area (ha) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Temp. | Permanent | Gen | SC | OBC | Total | | | (Habitat, Road. Etc. | (Geographical) |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 415.32 | 117.86 | 20.77 | 7.30 | 202.05 | 115.06 | 244.14 | 561.25 | 0.00 | 47.91 | 75.29 | 684.45 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 283.67 | 80.50 | 14.18 | 4.98 | 138.00 | 78.58 | 166.75 | 383.33 | 0.00 | 32.72 | 51.42 | 467.48 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 121.06 | 34.36 | 6.05 | 2.13 | 58.90 | 33.54 | 71.17 | 163.60 | 0.00 | 13.97 | 21.95 | 199.51 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 553.21 | 156.99 | 27.66 | 9.72 | 269.13 | 153.26 | 325.20 | 747.59 | 0.00 | 63.82 | 100.29 | 911.69 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Jaspura (2C1B2b 1b) | Gauri Kalan, Jaspura, Amara | 482.79 | 137.01 | 24.14 | 8.48 | 234.87 | 133.75 | 283.80 | 652.42 | 0.00 | 55.69 | 87.52 | 795.64 |
| 6 | Terha (2C1B2c 1e) | Terha, Gadariya | 862.87 | 244.87 | 43.14 | 15.16 | 419.77 | 239.04 | 507.23 | 1166.04 | 0.00 | 99.54 | 156.42 | 1422.00 |
| 7 | Bhatha (2C1B2a 3h) | Jaspura, Bhatha, Nada Deo | 418.68 | 118.81 | 20.93 | 7.36 | 203.68 | 115.99 | 246.12 | 565.78 | 0.00 | 48.30 | 75.90 | 689.98 |
| 8 | Dhundh Pur (2C1B2c 2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 111.77 | 31.72 | 5.59 | 1.96 | 54.38 | 30.96 | 65.70 | 151.04 | 0.00 | 12.89 | 20.26 | 184.20 |
| 9 | Madauli Khurd (2C1B2n 1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | 415.38 | 117.88 | 20.77 | 7.30 | 202.08 | 115.07 | 244.18 | 561.33 | 0.00 | 47.92 | 75.30 | 684.55 |
| 10 | Kiswahi (2C1B2n 1e) | Kiswahi, Perehta | 454.49 | 128.98 | 22.72 | 7.98 | 221.10 | 125.91 | 267.17 | 614.18 | 0.00 | 52.43 | 82.39 | 749.00 |
| | **Total** | | **4119.26** | **1168.98** | **205.96** | **72.37** | **2003.97** | **1141.15** | **2421.46** | **5566.57** | **0.00** | **475.20** | **746.74** | **6788.50** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

## 2.3 Physiography

The micro-watersheds of IWMP-XI is situated at an elevation of some 73 to 133 m above mean sea level and has relief from 29 to 48 m. General topography of the watershed is mild to gentle.

| Name of MWS with code | Maximum | Minimum | Relief |
|---|---|---|---|
| Narjita (2ClB2b3a) | 126 | 89 | 37 |
| Gauri Kalan (2ClB2b2a) | 126 | 89 | 37 |
| Gadariya (2C1B2c1d) | 132 | 102 | 30 |
| Birkhera (2C1B2c1c) | 128 | 97 | 31 |
| Jaspura (2C1B2b1b) | 124 | 84 | 40 |
| Terha (2C1B2c1e) | 131 | 102 | 29 |
| Bhatha (2C1B2a3h) | 118 | 74 | 44 |
| Dhundh Pur (2C1B2c2b) | 133 | 94 | 39 |
| Madauli Khurd (2C1B2n1b) | 120 | 73 | 47 |
| Kiswahi (2C1B2n1e) | 126 | 78 | 48 |

*Source: Aster 30 meter dem*

**Slope**: Spatial distribution of different slope classes was prepared using Arc GIS. Slope was divided into five classes' viz. 0-0.5, 0.5-1.0, 1-3, 3-5, and more than 5 per cent. The dominant slope category in the project were 1-3 per cent (70.00%) followed by 3-5 per cent (14%).

## 2.4 Climate

The annual rainfall of the Bundelkhand region varies from 800 to 1300 mm, about 90% of which is received during South-West monsoon period. The major part of the rainfall is received during the month of July and August. The length of growing season in Bundelkhand ranges between 90 to 150 days depending upon rainfall and temperature regimes. The winter rains are erratic, occasional, meager and uncertain. The total rainy days/year vary from 30-45 in the region with an average of 37. The distribution of rainfall is very erratic. Low rainfall and drought are common features. Long dry spells during rainy season are also experienced often, which adversely affect the crops. It has been observed that in a cycle of 5 years, 2 are normal, 2 drought years and 1 is excessive rainfall year.

The climate of Banda is characterized by a hot dry summer and cold winter and is marked for high variability of rainfall year to year. There are primarily four seasons: – Dry Summer season – from March to May i.e. before advent of monsoon, moist summer season – from June to September (Monsoon) transition period - in October and November, which is the post monsoon period, and

winter season – from December to February The coldest months in the year are December and January. Average monthly rainfall and temperature

**Table 2.4: Average monthly rainfall and temperature at IWMP-XI, Banda, U.P.**

| Month | Rainfall in mm. | | | | | Temperature c | |
|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 | Max. | Min. |
| January | 0.0 | - | 0.0 | 13.7 | 0.3 | 6.5 | 3.5 |
| February | 93.9 | - | 0.0 | 37.0 | 9.8 | 11.2 | 8.4 |
| March | 41.2 | 0.0 | - | 0.0 | 0.0 | 32.8 | 21.6 |
| April | 0.0 | 0.0 | - | 0.0 | 0.0 | 38.4 | 29.7 |
| May | 0.0 | 16.1 | 47.0 | 1.7 | 38.5 | 45.4 | 34.2 |
| June | 36.0 | 121 | 544 | 7.1 | 218 | 47.2 | 35.1 |
| July | 144.5 | 444.2 | 143.1 | 243.4 | 245.1 | 46.4 | 33.6 |
| August | 186.7 | 193.9 | 194.0 | 168.7 | 316.2 | 42.3 | 31.7 |
| September | 93.9 | 66.0 | 178.1 | 167.9 | 146.6 | 37.4 | 29.2 |
| October | 0.0 | 6.0 | 74.5 | 7.3 | 0.0 | 34.7 | 28.5 |
| November | 0.0 | 9.7 | 16.3 | 22.2 | 0.0 | 31.4 | 19.8 |
| December | 0.0 | 0.0 | 8.7 | 0.5 | 0.0 | 24.4 | 9.3 |

*Source: Data site of Agro-meteorological Deptt.*

The open pan evaporation varied in the range of 0.5 to 23 mm/day during the year with average of about 5 mm/day. Average relative humidity varied in the range of 25 to 98 per cent, however the range of wind speed is 0.9 to 16 kmph. The details of flood and drought in the project area are showed in Table 2.5.

**Table 2.5: Details of flood and drought in the project area (IWMP-XI, Banda) Project IWMP- XI**

| Name of Micro Watershed | Particulars | Villages | Periodicity | | Not affected |
|---|---|---|---|---|---|
| | | | Annual | Any other (please specify) | |
| Narjita<br>Gauri Kalan<br>Gadariya<br>Birkhera<br>Jaspura<br>Terha<br>Bhatha<br>Dhundh Pur<br>Madauli Khurd<br>Kiswahi | Flood | No. of villages21 | NA | NA | NA |
| | | Name(s) of villages | NA | NA | NA |
| | Drought | **No. of villages**- 21<br>**Name of Village:** Terha, Sikahula, Narjita, Gauri Kalan, Jaspura, Gadariya, Sikuwa, Bhatha, Bir Khera, Bahundari, Dhundh Pur, Perehta, Mauhar, Atraia, Padhauli, Badanpur, Nada Deo, Amara, Gauri, Kiswahi andMadauli Khurd | **twice in 5 years** however, the region experienced severe drought during 2004-2007 and 2009 & 2010 were deficit by about 17 to 20 per cent | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

# CHAPTER – 3

BASELINE SURVEY AND PARTICIPATORY RURAL APPRAISAL

Participatory rural appraisal (PRA) is a tool to appraise the socio-economic conditions along with all kind of resources available in the watershed through the active participation of the villagers. There are several tools and techniques of PRA. The PRA including house hold survey of Narjita, Gauri Kalan, Gadariya, Birkhera, Jaspura, Terha, Bhatha, Dhundh Pur, Madauli Khurd and Kiswahi micro-watershed was conducted by PIA and described in the subsequent sections.

## 3.1. Social-Economic Analysis

About 20.5 per cent of the population is scheduled caste. Population details of the IWMP-XI are given in Table 3.1. In general 9.00 per cent population migrate from the project area due to drought and earn livelihood, however, migration was more than 50 per cent during 2007-08 due to continuous drought from 2004 to 2007 in the region. Majority of population migrate to New Delhi, Haryana and Punjab during drought year. The scenario of migration, infrastructure and common properties resources available in the project was analysed through house hold survey and is presented in Table 3.2, 3.3 and 3.4, respectively.

**Table 3.1: Demographic Features in the project area (IWMP-XI, Banda)**

| Sr. No. | Name of Micro Watershed | Name of village | Total Population | | | Population of SC/ST | | |
|---|---|---|---|---|---|---|---|---|
| | | | Total | Male | Female | Total | Male | Female |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 1425 | 741 | 684 | 291 | 151 | 140 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 1004 | 522 | 482 | 108 | 10 | 98 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 425 | 221 | 204 | 86 | 45 | 41 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 1875 | 975 | 900 | 383 | 199 | 184 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 1650 | 858 | 792 | 337 | 175 | 162 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 375 | 195 | 180 | 75 | 39 | 36 |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | 1425 | 741 | 684 | 291 | 151 | 140 |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 2925 | 1521 | 1404 | 598 | 311 | 287 |
| 9 | Madauli Khurd | Gauri khera, Bahundari, | 1409 | 733 | 676 | 288 | 150 | 138 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (2C1B2n1b) | Amara, Madauli Khurd | | | | | | |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 1539 | 800 | 739 | 315 | 164 | 151 |
| | **Total** | | **14052** | **7307** | **6745** | **2772** | **1395** | **1377** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.2: Details of land holding pattern in IWMP-XI, Banda**

| Sr. No. | Names MWS with code | Type of Farmer | No. of households | No. of BPL households | Land holding (ha) | | |
|---|---|---|---|---|---|---|---|
| | | | | | **Irrigated** | **Rainfed** | **Total** |
| **1** | Narjita (2ClB2b3a) | (i) Big (above 4 ha.) | 25 | - | 58.93 | 46.07 | 105.00 |
| | | (ii) Medium (2-4 ha.) | 100 | - | 35.36 | 184.64 | 220.00 |
| | | (iii) Small (1-2 ha.) | 135 | 16 | 23.57 | 138.43 | 162.00 |
| | | (iv) Marginal (0-1ha.) | 230 | 195 | - | 74.25 | 74.25 |
| | | (v) Landless | 20 | 20 | - | - | - |
| | | **Total** | **510** | **231** | **117.86** | **443.39** | **561.25** |
| **2** | Gauri Kalan (2ClB2b2a) | (i) Big (above 4 ha.) | 15 | - | 40.25 | 22.75 | 63.00 |
| | | (ii) Medium (2-4 ha.) | 80 | - | 24.15 | 143.85 | 168.00 |
| | | (iii) Small (1-2 ha.) | 95 | 11 | 16.10 | 88.40 | 104.50 |
| | | (iv) Marginal (0-1ha.) | 138 | 117 | - | 47.83 | 47.83 |
| | | (v) Landless | 12 | 12 | - | - | - |
| | | **Total** | **340** | **140** | **80.50** | **302.83** | **383.33** |
| **3** | Gadariya (2C1B2c1d) | (i) Big (above 4 ha.) | 9 | - | 17.18 | 22.69 | 39.87 |
| | | (ii) Medium (2-4 ha.) | 25 | - | 10.31 | 52.19 | 62.50 |
| | | (iii) Small (1-2 ha.) | 36 | 4 | 6.87 | 39.93 | 46.80 |
| | | (iv) Marginal (0-1ha.) | 57 | 48 | - | 14.43 | 14.43 |
| | | (v) Landless | 3 | 3 | - | - | - |
| | | **Total** | **130** | **55** | **34.36** | **129.24** | **163.60** |
| **4** | Birkhera (2C1B2c1c) | (i) Big (above 4 ha.) | 32 | - | 78.50 | 55.90 | 134.40 |
| | | (ii) Medium (2-4 ha.) | 140 | - | 47.10 | 246.90 | 294.00 |
| | | (iii) Small (1-2 ha.) | 180 | 21 | 31.40 | 166.60 | 198.00 |
| | | (iv) Marginal (0-1ha.) | 285 | 242 | - | 121.19 | 121.19 |
| | | (v) Landless | 23 | 23 | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Total** | **660** | **286** | **156.99** | **590.60** | **747.59** |
| **5** | Jaspura (2C1B2b1b) | (i) Big (above 4 ha.) | 30 | - | 68.50 | 57.50 | 126.00 |
| | | (ii) Medium (2-4 ha.) | 115 | - | 41.10 | 200.40 | 241.50 |
| | | (iii) Small (1-2 ha.) | 160 | 19 | 27.40 | 148.60 | 176.00 |
| | | (iv) Marginal (0-1ha.) | 277 | 235 | - | 108.92 | 108.92 |
| | | (v) Landless | 18 | 18 | - | - | - |
| | | **Total** | **600** | **272** | **137.01** | **515.41** | **652.42** |
| **6** | Terha (2C1B2c1e) | (i) Big (above 4 ha.) | 45 | - | 122.43 | 66.57 | 189.00 |
| | | (ii) Medium (2-4 ha.) | 230 | - | 73.46 | 409.54 | 483.00 |
| | | (iii) Small (1-2 ha.) | 280 | 33 | 48.97 | 259.03 | 308.00 |
| | | (iv) Marginal (0-1ha.) | 315 | 267 | - | 186.04 | 186.04 |
| | | (v) Landless | 30 | 30 | - | - | - |
| | | **Total** | **900** | **330** | **244.87** | **921.17** | **1166.04** |
| **7** | Bhatha (2C1B2a3h) | (i) Big (above 4 ha.) | 26 | - | 59.41 | 49.79 | 109.20 |
| | | (ii) Medium (2-4 ha.) | 120 | - | 35.64 | 216.36 | 252.00 |
| | | (iii) Small (1-2 ha.) | 135 | 16 | 23.76 | 124.74 | 148.50 |
| | | (iv) Marginal (0-1ha.) | 184 | 156 | - | 56.08 | 56.08 |
| | | (v) Landless | 15 | 15 | - | - | - |
| | | **Total** | **480** | **187** | **118.81** | **446.97** | **565.78** |
| **8** | Dhundh Pur (2C1B2c2b) | (i) Big (above 4 ha.) | 8 | - | 15.86 | 20.14 | 36.00 |
| | | (ii) Medium (2-4 ha.) | 25 | - | 9.52 | 42.98 | 52.50 |
| | | (iii) Small (1-2 ha.) | 30 | 3 | 6.34 | 32.66 | 39.00 |
| | | (iv) Marginal (0-1ha.) | 54 | 45 | - | 23.54 | 23.54 |
| | | (v) Landless | 3 | 3 | - | - | - |
| | | **Total** | **120** | **51** | **31.72** | **119.32** | **151.04** |
| **9** | Madauli Khurd (2C1B2n1b) | (i) Big (above 4 ha.) | 26 | - | 58.94 | 47.66 | 106.60 |
| | | (ii) Medium (2-4 ha.) | 118 | - | 35.36 | 212.44 | 247.80 |
| | | (iii) Small (1-2 ha.) | 140 | 16 | 23.58 | 130.42 | 154.00 |
| | | (iv) Marginal (0-1ha.) | 179 | 152 | - | 52.93 | 52.93 |
| | | (v) Landless | 17 | 17 | - | - | - |
| | | **Total** | **480** | **185** | **117.88** | **443.45** | **561.33** |
| **10** | Kiswahi (2C1B2n1e) | (i) Big (above 4 ha.) | 30 | - | 64.49 | 58.51 | 123.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (ii) Medium (2-4 ha.) | 120 | - | 38.69 | 213.31 | 252.00 |
| | | (iii) Small (1-2 ha.) | 140 | 16 | 25.80 | 128.20 | 154.00 |
| | | (iv) Marginal (0-1ha.) | 258 | 219 | - | 85.18 | 85.18 |
| | | (v) Landless | 22 | 22 | - | - | - |
| | | **Total** | **570** | **257** | **128.98** | **485.20** | **614.18** |
| | | **Total** | **4790** | **1994** | **1169** | **4398** | **5566.56** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.3: Details of migration from Project area (IWMP-XI, Banda): Pre-project status**

| Sl. No. | Names of Watershed | Name of village | No. of persons migrating | No. of days per year of migration | Major reason(s) for migrating | Distance of destination of migration from the village (km) | Occupation during migration | Income from such occupation (Rs. in lakh) |
|---|---|---|---|---|---|---|---|---|
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 229 | 100-150 | Drought / Earn money | 800-1600 Km | Labour | 0.25-0.40 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 153 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 58 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 297 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 270 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 405 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | 216 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 54 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | 216 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 256 | 100-150 | -do- | 800-1600 Km | Labour | 0.25-0.40 |
| | **Total** | | **2154** | | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.4: Details of infrastructure in IWMP-XI, Banda**

| Name of Project | Parameters | | Status | | | |
|---|---|---|---|---|---|---|
| **IWMP- XI** | (i) | Name of villages connected to the main road by an all-weather road | Banda to Visanda road | | | |
| | (ii) | Village's Name provided with electricity | All villages | | | |
| | (iii) | No. of households without access to drinking water | About 5-10 per cent house holds depends on others' source of drinking water | | | |
| | (iv) | No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI) | (P) 24 | (S) 08 | (HS) 03 | (VI) - |
| | (v) | Names of villages with access to Primary Health Centre | 01 | | | |
| | (vi) | Names of villages with access to Veterinary Dispensary | 01 | | | |
| | (vii) | Names of villages with access to Post Office | 03 | | | |
| | (viii) | Names of villages with access to Banks | 01 | | | |
| | (ix) | Names of villages with access to Markets/ mandis | N.A | | | |
| | (x) | Names of villages with access to Agro-industries | N.A | | | |
| | (xi) | Total quantity of surplus milk/ deficit | - | | | |
| | (xii) | No. of milk collection centers | (U) | (S) | (PA) | (O) |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O)) | - | - | - | 03 |
| | (xiii) | Name of villages with access to Anganwadi Centre | At each Gram Panchayat | | | |
| | (xiv) | Cummunity centre, Panchayat Ghar | Available | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.5: Details of common property resources In IWMP-XI, Banda, U.P.**

| S. No. | Names of Project | CPR Particulars | Total Area (ha) Area owned/ In possession of | | | | Area available for treatment (ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Pvt. persons | Govt. Revenue | PRI | Any other (Pl. Specify) | Pvt. persons | Govt. (specify dept.) | PRI | Any other (Pl. Specify) |
| | **IWMP-XI** | (i) Wasteland/ degraded land | 398.26 | - | 39.16 | - | 398.26 | - | 39.16 | - |
| | | (ii) Pastures | - | - | - | - | - | - | - | - |
| | | (iii) Orchards | - | - | - | - | - | - | - | - |
| | | (iv) Village Woodlot | 31.26 | - | 34.19 | - | 31.26 | - | 34.19 | - |
| | | (v) Forest | - | - | - | - | - | - | - | - |
| | | (vi) Village Ponds/ Tanks | - | - | 9.48 | - | - | - | - | - |
| | | (vii) Community Buildings | - | - | 35.16 | - | - | - | - | - |
| | | (viii) Weekly Markets | - | - | - | - | - | - | - | - |
| | | (ix) Permanent markets | - | - | - | - | - | - | - | - |
| | | (x) Temples/ Places of worship | - | - | 15.69 | - | - | - | - | - |
| | | (xi) Habitat, Chakmarg, Sector, Road etc | - | 368.46 | - | - | - | - | - | - |
| | **GT for IWMP-XI** | | **429.52** | **368.46** | **133.68** | - | **429.52** | - | **73.35** | - |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.2 Soil and Land Holding Pattern

Major soils of the project are light and medium textured soil (sandy loam, loam and silty loam). Area details of each micro watershed are given in Table 3.6

**Table 3.6: Details of Soil texture in IWMP-XI, Banda**

| Sr. No. | MWS Project | Area in different Soil Group (ha) | | | |
|---|---|---|---|---|---|
| | | Light textured soil (sand, loamy sand) | Medium textured soil (Sandy loam, loam, silt loam) | Heavy textured soil (Clayey) | Details |
| 1 | Narjita (2ClB2b3a) | 54.76 | 171.11 | 458.58 | Purwa, Mar+kabar |
| 2 | Gauri Kalan (2ClB2b2a) | 37.40 | 116.87 | 313.21 | Purwa, Mar+kabar |
| 3 | Gadariya (2C1B2c1d) | 15.96 | 49.88 | 133.67 | Purwa, Mar+kabar |
| 4 | Birkhera (2C1B2c1c) | 72.94 | 227.92 | 610.83 | Purwa, Mar+kabar |
| 5 | Jaspura (2C1B2b1b) | 63.65 | 198.91 | 533.08 | Purwa, Mar+kabar |
| 6 | Terha (2C1B2c1e) | 14.74 | 46.05 | 123.41 | Purwa, Mar+kabar |
| 7 | Bhatha (2C1B2a3h) | 55.20 | 172.50 | 462.29 | Purwa, Mar+kabar |
| 8 | Dhundh Pur (2C1B2c2b) | 113.76 | 355.50 | 952.74 | Purwa, Mar+kabar |
| 9 | Madauli Khurd (2C1B2n1b) | 54.76 | 171.14 | 458.65 | Purwa, Mar+kabar |
| 10 | Kiswahi (2C1B2n1e) | 59.92 | 187.25 | 501.83 | Purwa, Mar+kabar |
| | **Total** | **543.08** | **1697.13** | **4548.30** | **6788.50** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.3 Major Crops, its Productivity and Production

Micro-watershed wise grown crops, their productivity and production under irrigated and rainfed condition is given in Table 3.7. As far as productivity of cereals is concerned, it is significantly lower than the state and national average. Micro-watershed wise cropping intensity varied from 107.13 to 118.63 per cent with 112.25 per cent for the project.

**Table 3.7: Micro-watershed wise details of Crops, their Productivity and Production in IWMP-XI, Banda Narjita (2ClB2b3a)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 26.35 | 0.00 | 2.90 | 0.00 | 76.42 | 0.00 | 152.83 |
| 2 | Moong | 0.00 | 8.69 | 0.00 | 2.80 | 0.00 | 24.33 | 0.00 | 43.80 |
| 3 | Arhar | 0.00 | 36.39 | 0.00 | 4.90 | 0.00 | 178.31 | 0.00 | 30.31 |
| 4 | Bajra | 0.00 | 7.26 | 0.00 | 4.70 | 0.00 | 34.12 | 0.00 | 156.96 |
| 5 | Sorghum | 0.00 | 74.36 | 0.00 | 5.90 | 0.00 | 438.72 | 0.00 | 2018.13 |
| 6 | Til | 0.00 | 15.36 | 0.00 | 1.80 | 0.00 | 27.65 | 0.00 | 52.53 |
| 7 | Paddy | 45.36 | 0.00 | 10.35 | 0.00 | 469.48 | 0.00 | 422.53 | 0.00 |
| | **Total** | **45.36** | **168.41** | | | **469.48** | **779.55** | **422.53** | **2454.56** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 72.50 | 24.15 | 18.60 | 10.30 | 1348.54 | 248.75 | 1415.97 | 246.26 |
| 2 | Masoor | 0.00 | 65.36 | 0.00 | 11.50 | 0.00 | 751.64 | 0.00 | 744.12 |
| 3 | Gram | 0.00 | 112.36 | 0.00 | 4.80 | 0.00 | 539.33 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 26.35 | 0.00 | 5.90 | 0.00 | 155.47 | 0.00 | 149.25 |
| 5 | Mustard | 0.00 | 81.36 | 0.00 | 6.80 | 0.00 | 553.25 | 0.00 | 1936.37 |
| | **Total** | **72.50** | **309.58** | | | **1348.54** | **2248.43** | **1415.97** | **10796.24** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **561.25** | **Cropping Intensity** | | **106.17** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Gauri Kalan (2ClB2b2a)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 18.36 | 0.00 | 2.90 | 0.00 | 53.24 | 0.00 | 106.49 |
| 2 | Moong | 0.00 | 20.36 | 0.00 | 2.80 | 0.00 | 57.01 | 0.00 | 102.61 |
| 3 | Arhar | 0.00 | 10.35 | 0.00 | 4.90 | 0.00 | 50.72 | 0.00 | 8.62 |
| 4 | Bajra | 0.00 | 12.35 | 0.00 | 4.70 | 0.00 | 58.05 | 0.00 | 267.01 |
| 5 | Sorghum | 0.00 | 39.58 | 0.00 | 5.90 | 0.00 | 233.52 | 0.00 | 1074.20 |
| 6 | Til | 0.00 | 9.36 | 0.00 | 1.80 | 0.00 | 16.85 | 0.00 | 32.01 |
| 7 | Paddy | 32.57 | 0.00 | 10.35 | 0.00 | 337.10 | 0.00 | 303.39 | 0.00 |
| | **Total** | **32.57** | **110.36** | | | **337.10** | **469.38** | **303.39** | **1590.94** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 47.93 | 5.36 | 18.60 | 10.30 | 891.50 | 55.21 | 936.07 | 54.66 |
| 2 | Masoor | 0.00 | 75.26 | 0.00 | 11.50 | 0.00 | 865.49 | 0.00 | 856.84 |
| 3 | Gram | 0.00 | 103.26 | 0.00 | 4.80 | 0.00 | 495.65 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 13.02 | 0.00 | 5.90 | 0.00 | 76.82 | 0.00 | 73.75 |
| 5 | Mustard | 0.00 | 12.36 | 0.00 | 6.80 | 0.00 | 84.05 | 0.00 | 294.17 |
| | **Total** | **47.93** | **209.26** | | | **891.50** | **1577.21** | **936.07** | **8999.64** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **383.33** | **Cropping Intensity** | | **104.38** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Gadariya (2C1B2c1d)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 9.24 | 0.00 | 2.90 | 0.00 | 26.80 | 0.00 | 53.59 |
| 2 | Moong | 0.00 | 0.00 | 0.00 | 2.80 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Arhar | 0.00 | 6.38 | 0.00 | 4.90 | 0.00 | 31.26 | 0.00 | 5.31 |
| 4 | Bajra | 0.00 | 0.00 | 0.00 | 4.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | Sorghum | 0.00 | 26.35 | 0.00 | 5.90 | 0.00 | 155.47 | 0.00 | 715.14 |
| 6 | Til | 0.00 | 5.00 | 0.00 | 1.80 | 0.00 | 9.00 | 0.00 | 17.10 |
| 7 | Paddy | 13.26 | 0.00 | 10.35 | 0.00 | 137.24 | 0.00 | 123.52 | 0.00 |
| | **Total** | **13.26** | **46.97** | | | **137.24** | **222.52** | **123.52** | **791.15** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 21.10 | 6.39 | 18.60 | 10.30 | 392.38 | 65.82 | 412.00 | 65.16 |
| 2 | Masoor | 0.00 | 15.36 | 0.00 | 11.50 | 0.00 | 176.64 | 0.00 | 174.87 |
| 3 | Gram | 0.00 | 49.36 | 0.00 | 4.80 | 0.00 | 236.93 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 7.35 | 0.00 | 5.90 | 0.00 | 43.37 | 0.00 | 41.63 |
| 5 | Mustard | 0.00 | 16.35 | 0.00 | 6.80 | 0.00 | 111.18 | 0.00 | 389.13 |
| | **Total** | **21.10** | **94.81** | | | **392.38** | **633.93** | **412.00** | **8391.03** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **163.60** | **Cropping Intensity** | | **107.66** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Birkhera (2C1B2c1c)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 58.26 | 0.00 | 2.90 | 0.00 | 168.95 | 0.00 | 337.91 |
| 2 | Moong | 0.00 | 22.69 | 0.00 | 2.80 | 0.00 | 63.53 | 0.00 | 114.36 |
| 3 | Arhar | 0.00 | 75.36 | 0.00 | 4.90 | 0.00 | 369.26 | 0.00 | 62.77 |
| 4 | Bajra | 0.00 | 15.26 | 0.00 | 4.70 | 0.00 | 71.72 | 0.00 | 329.92 |
| 5 | Sorghum | 0.00 | 32.26 | 0.00 | 5.90 | 0.00 | 190.33 | 0.00 | 875.54 |
| 6 | Til | 0.00 | 13.26 | 0.00 | 1.80 | 0.00 | 23.87 | 0.00 | 45.35 |
| 7 | Paddy | 68.35 | 0.00 | 10.35 | 0.00 | 707.42 | 0.00 | 636.68 | 0.00 |
| | **Total** | **68.35** | **217.09** | | | **707.42** | **887.67** | **636.68** | **1765.85** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 88.64 | 31.98 | 18.60 | 10.30 | 1648.76 | 329.39 | 1731.20 | 326.10 |
| 2 | Masoor | 0.00 | 121.36 | 0.00 | 11.50 | 0.00 | 1395.64 | 0.00 | 1381.68 |
| 3 | Gram | 0.00 | 182.36 | 0.00 | 4.80 | 0.00 | 875.33 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 26.34 | 0.00 | 5.90 | 0.00 | 155.41 | 0.00 | 149.19 |
| 5 | Mustard | 0.00 | 75.26 | 0.00 | 6.80 | 0.00 | 511.77 | 0.00 | 1791.19 |
| | **Total** | **88.64** | **437.30** | | | **1648.76** | **3267.54** | **1731.20** | **11368.40** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **747.59** | **Cropping Intensity** | | **108.53** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Jaspura (2C1B2b1b)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 41.26 | 0.00 | 2.90 | 0.00 | 119.65 | 0.00 | 239.31 |
| 2 | Moong | 0.00 | 21.26 | 0.00 | 2.80 | 0.00 | 59.53 | 0.00 | 107.15 |
| 3 | Arhar | 0.00 | 12.36 | 0.00 | 4.90 | 0.00 | 60.56 | 0.00 | 10.30 |
| 4 | Bajra | 0.00 | 16.36 | 0.00 | 4.70 | 0.00 | 76.89 | 0.00 | 353.70 |
| 5 | Sorghum | 0.00 | 69.32 | 0.00 | 5.90 | 0.00 | 408.99 | 0.00 | 1881.34 |
| 6 | Til | 0.00 | 55.26 | 0.00 | 1.80 | 0.00 | 99.47 | 0.00 | 188.99 |
| 5 | Paddy | 48.29 | 0.00 | 10.35 | 0.00 | 499.80 | 0.00 | 449.82 | 0.00 |
| | **Total** | **48.29** | **215.82** | | | **499.80** | **825.09** | **449.82** | **2780.79** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 88.72 | 40.39 | 18.60 | 10.30 | 1650.18 | 416.02 | 1732.69 | 411.86 |
| 2 | Masoor | 0.00 | 100.39 | 0.00 | 11.50 | 0.00 | 1154.49 | 0.00 | 1142.94 |
| 3 | Gram | 0.00 | 179.24 | 0.00 | 4.80 | 0.00 | 860.35 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 25.39 | 0.00 | 5.90 | 0.00 | 149.80 | 0.00 | 143.81 |
| 5 | Mustard | 0.00 | 46.13 | 0.00 | 6.80 | 0.00 | 313.68 | 0.00 | 1097.89 |
| | **Total** | **88.72** | **391.54** | | | **1650.18** | **2894.34** | **1732.69** | **10516.74** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **652.42** | **Cropping Intensity** | | **106.69** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Terha (2C1B2c1e)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 58.62 | 0.00 | 2.90 | 0.00 | 170.00 | 0.00 | 340.00 |
| 2 | Moong | 0.00 | 18.69 | 0.00 | 2.80 | 0.00 | 52.33 | 0.00 | 94.20 |
| 3 | Arhar | 0.00 | 76.35 | 0.00 | 4.90 | 0.00 | 374.12 | 0.00 | 63.60 |
| 4 | Bajra | 0.00 | 25.36 | 0.00 | 4.70 | 0.00 | 119.19 | 0.00 | 548.28 |
| 5 | Sorghum | 0.00 | 106.35 | 0.00 | 5.90 | 0.00 | 627.47 | 0.00 | 2886.34 |
| 6 | Til | 0.00 | 45.32 | 0.00 | 1.80 | 0.00 | 81.58 | 0.00 | 154.99 |
| 5 | Paddy | 95.36 | 0.00 | 10.35 | 0.00 | 986.98 | 0.00 | 888.28 | 0.00 |
| | **Total** | **95.36** | **330.69** | | | **986.98** | **1424.68** | **888.28** | **4087.41** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 149.51 | 55.36 | 18.60 | 10.30 | 2780.86 | 570.21 | 2919.90 | 564.51 |
| 2 | Masoor | 0.00 | 205.36 | 0.00 | 11.50 | 0.00 | 2361.64 | 0.00 | 2338.02 |
| 3 | Gram | 0.00 | 365.24 | 0.00 | 4.80 | 0.00 | 1753.15 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 88.95 | 0.00 | 5.90 | 0.00 | 524.81 | 0.00 | 503.81 |
| 5 | Mustard | 0.00 | 36.25 | 0.00 | 6.80 | 0.00 | 246.50 | 0.00 | 862.75 |
| | **Total** | **149.51** | **751.16** | | | **2780.86** | **5456.31** | **2919.90** | **11989.33** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **1166.04** | **Cropping Intensity** | | **105.60** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Bhatha (2C1B2a3h)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 35.26 | 0.00 | 2.90 | 0.00 | 102.25 | 0.00 | 204.51 |
| 2 | Moong | 0.00 | 10.35 | 0.00 | 2.80 | 0.00 | 28.98 | 0.00 | 52.16 |
| 3 | Arhar | 0.00 | 55.35 | 0.00 | 4.90 | 0.00 | 271.22 | 0.00 | 46.11 |
| 4 | Bajra | 0.00 | 6.98 | 0.00 | 4.70 | 0.00 | 32.81 | 0.00 | 150.91 |
| 5 | Sorghum | 0.00 | 64.32 | 0.00 | 5.90 | 0.00 | 379.49 | 0.00 | 1745.64 |
| 6 | Til | 0.00 | 8.14 | 0.00 | 1.80 | 0.00 | 14.65 | 0.00 | 27.84 |
| 5 | Paddy | 48.58 | 0.00 | 10.35 | 0.00 | 502.80 | 0.00 | 452.52 | 0.00 |
| | **Total** | **48.58** | **180.40** | | | **502.80** | **829.40** | **452.52** | **2227.17** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 70.23 | 43.15 | 18.60 | 10.30 | 1306.36 | 444.45 | 1371.68 | 440.00 |
| 2 | Masoor | 0.00 | 101.36 | 0.00 | 11.50 | 0.00 | 1165.64 | 0.00 | 1153.98 |
| 3 | Gram | 0.00 | 120.35 | 0.00 | 4.80 | 0.00 | 577.68 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 15.36 | 0.00 | 5.90 | 0.00 | 90.62 | 0.00 | 87.00 |
| 5 | Mustard | 0.00 | 21.36 | 0.00 | 6.80 | 0.00 | 145.25 | 0.00 | 508.37 |
| | **Total** | **70.23** | **301.58** | | | **1306.36** | **2423.64** | **1371.68** | **9909.59** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **565.78** | **Cropping Intensity** | | **106.19** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Dhundh Pur (2C1B2c2b)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 5.36 | 0.00 | 2.90 | 0.00 | 15.54 | 0.00 | 31.09 |
| 2 | Moong | 0.00 | 0.00 | 0.00 | 2.80 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Arhar | 0.00 | 15.36 | 0.00 | 4.90 | 0.00 | 75.26 | 0.00 | 12.79 |
| 4 | Bajra | 0.00 | 0.00 | 0.00 | 4.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | Sorghum | 0.00 | 19.36 | 0.00 | 5.90 | 0.00 | 114.22 | 0.00 | 525.43 |
| 6 | Til | 0.00 | 6.38 | 0.00 | 1.80 | 0.00 | 11.48 | 0.00 | 21.82 |
| 5 | Paddy | 10.35 | 0.00 | 10.35 | 0.00 | 107.12 | 0.00 | 96.41 | 0.00 |
| | **Total** | **10.35** | **46.46** | | | **107.12** | **216.52** | **96.41** | **591.13** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 21.37 | 4.36 | 18.60 | 10.30 | 397.47 | 44.91 | 417.34 | 44.46 |
| 2 | Masoor | 0.00 | 21.35 | 0.00 | 11.50 | 0.00 | 245.53 | 0.00 | 243.07 |
| 3 | Gram | 0.00 | 35.26 | 0.00 | 4.80 | 0.00 | 169.25 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 7.36 | 0.00 | 5.90 | 0.00 | 43.42 | 0.00 | 41.69 |
| 5 | Mustard | 0.00 | 12.34 | 0.00 | 6.80 | 0.00 | 83.91 | 0.00 | 293.69 |
| | **Total** | **21.37** | **80.67** | | | **397.47** | **587.02** | **417.34** | **8343.15** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **151.04** | **Cropping Intensity** | | **105.17** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Madauli Khurd (2C1B2n1b)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 40.26 | 0.00 | 2.90 | 0.00 | 116.75 | 0.00 | 233.51 |
| 2 | Moong | 0.00 | 5.13 | 0.00 | 2.80 | 0.00 | 14.36 | 0.00 | 25.86 |
| 3 | Arhar | 0.00 | 69.29 | 0.00 | 4.90 | 0.00 | 339.52 | 0.00 | 57.72 |
| 4 | Bajra | 0.00 | 15.26 | 0.00 | 4.70 | 0.00 | 71.72 | 0.00 | 329.92 |
| 5 | Sorghum | 0.00 | 26.34 | 0.00 | 5.90 | 0.00 | 155.41 | 0.00 | 714.87 |
| 6 | Til | 0.00 | 42.35 | 0.00 | 1.80 | 0.00 | 76.23 | 0.00 | 144.84 |
| 5 | Paddy | 39.68 | 0.00 | 10.35 | 0.00 | 410.69 | 0.00 | 369.62 | 0.00 |
| | **Total** | **39.68** | **198.63** | | | **410.69** | **774.00** | **369.62** | **1506.71** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 78.20 | 26.35 | 18.60 | 10.30 | 1454.51 | 271.41 | 1527.24 | 268.69 |
| 2 | Masoor | 0.00 | 64.12 | 0.00 | 11.50 | 0.00 | 737.38 | 0.00 | 730.01 |
| 3 | Gram | 0.00 | 102.36 | 0.00 | 4.80 | 0.00 | 491.33 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 34.26 | 0.00 | 5.90 | 0.00 | 202.13 | 0.00 | 194.05 |
| 5 | Mustard | 0.00 | 55.68 | 0.00 | 6.80 | 0.00 | 378.62 | 0.00 | 1325.18 |
| | **Total** | **78.20** | **282.77** | | | **1454.51** | **2080.87** | **1527.24** | **10238.17** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **561.33** | **Cropping Intensity** | | **106.76** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Kiswahi (2C1B2n1e)**

| S.No | Crop | Area in (Ha.) | | Productivity q,/Ha | | Production (q.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grain/Main product | | Fodder/Fuel/ Other Product. | |
| | | Irrigated | Rainfed | Irrigated | Rainfed. | Irrigated | Rainfed | Irrigated | Rainfed |
| A | **Kharif** | | | | | | | | |
| 1 | Urd | 0.00 | 34.26 | 0.00 | 2.90 | 0.00 | 99.35 | 0.00 | 198.71 |
| 2 | Moong | 0.00 | 19.26 | 0.00 | 2.80 | 0.00 | 53.93 | 0.00 | 97.07 |
| 3 | Arhar | 0.00 | 48.26 | 0.00 | 4.90 | 0.00 | 236.47 | 0.00 | 40.20 |
| 4 | Bajra | 0.00 | 16.35 | 0.00 | 4.70 | 0.00 | 76.85 | 0.00 | 353.49 |
| 5 | Sorghum | 0.00 | 65.26 | 0.00 | 5.90 | 0.00 | 385.03 | 0.00 | 1771.16 |
| 6 | Til | 0.00 | 21.35 | 0.00 | 1.80 | 0.00 | 38.43 | 0.00 | 73.02 |
| 5 | Paddy | 48.39 | 0.00 | 10.35 | 0.00 | 500.84 | 0.00 | 450.75 | 0.00 |
| | **Total** | **48.39** | **204.74** | | | **500.84** | **890.07** | **450.75** | **2533.64** |
| **B** | **Rabi** | | | | | | | | |
| 1 | Wheat | 80.59 | 29.35 | 18.60 | 10.30 | 1498.93 | 302.31 | 1573.88 | 299.28 |
| 2 | Masoor | 0.00 | 23.26 | 0.00 | 11.50 | 0.00 | 267.49 | 0.00 | 264.82 |
| 3 | Gram | 0.00 | 154.26 | 0.00 | 4.80 | 0.00 | 740.45 | 0.00 | 7720.24 |
| 4 | Pea | 0.00 | 32.26 | 0.00 | 5.90 | 0.00 | 190.33 | 0.00 | 182.72 |
| 5 | Mustard | 0.00 | 75.36 | 0.00 | 6.80 | 0.00 | 512.45 | 0.00 | 1793.57 |
| | **Total** | **80.59** | **314.49** | | | **1498.93** | **2013.03** | **1573.88** | **10260.63** |
| **C** | **Zaid** | | | | | | | | |
| | Nil | | | | | | | | |
| | **Cultivable Area** | **614.18** | **Cropping Intensity** | | **105.54** | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

It was observed that the productivity of wheat, gram, mustard, arhar and linseed was about 66, 37, 33,49 and 26 per cent, respectively, less than the average (last 10 years- *Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation*) productivity of the state of Uttar Pradesh.

**Table 3.8: Food, fodder and fuel production in the project area (IWMP-XI, District- Banda)**

| Summary | Unit | Production During Kharif | Production during Rabi | Total Production | Remarks |
|---|---|---|---|---|---|
| **Food Production (Atlas.)** | | | | | |
| Cereals | q | 10276.17 | 16117.94 | 26394.11 | - |
| Pulses | q | 1302.97 | 17493.19 | 18796.16 | - |
| Oilseed | q | 399.20 | 2940.66 | 3339.86 | - |
| **Total** | q | 11978.34 | 36551.79 | 48530.13 | - |
| | | | | | - |
| **Fodder Production (Atlas.)** | | | | | - |
| Dry Fodder | q | 131464.67 | | | - |
| Green Fodder | q | 16697.98 | | | - |
| **Fuel Production** | | | | | |
| Arhar+Mustard+Til Plants | q | 10630.05 | | | - |
| **Over all Cropping Intensity** | | 106.27 | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.4 Agroforestry and Horticulture

There is no systematic agroforestry and orchard in the project area, however, few scattered trees of desi ber, aonla, guava, kathal, etc. was found in the micro-watersheds which is consumed locally (Table 3.9).

**Table 3.9: Agroforestry and Horticulture Status in Microwatershed**

| S. N. | Name of micro watershed with code | Name of village | Name of Important horticultural crop | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Orchard | | | | Scattered Fruit Crop | | |
| | | | Name | Area ha. | Productivity qtl/ha | Production qtls | No. | Productivity qtl/No. | Production qtls |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | - | - | - | - | 23 | 0.28 | 6.4 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | - | - | - | - | 24 | 0.25 | 6.0 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | - | - | - | - | 6 | 0.27 | 1.6 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | - | - | - | - | 25 | 0.21 | 5.3 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | - | - | - | - | 29 | 0.26 | 7.5 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | - | - | - | - | 36 | 0.24 | 8.6 |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | - | - | - | - | 24 | 0.21 | 5.0 |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | - | - | - | - | 10 | 0.3 | 3.0 |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | - | - | - | - | 21 | 0.21 | 4.4 |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | - | - | - | - | 26 | 0.32 | 8.3 |
| | **Total** | | | | | | **201** | **0.26** | **49.8** |
| | ( Scattered fruit plant of Papaya, Kathal, Ber, Aonla, Guava, etc) | | | | | | | | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.5 Livestock and Fisheries

In the name of cattle mainly desi cow are found in the project which productivity is significantly lower than the average productivity of the state. The Details of livestock and its productivity are available in Table 3.10 and 3.11, respectively.

**Table 3.10: Livestock Population (no.) in IWMP-XI, Banda**

| Sr. No. | Name of Micro watershed with code | Name of Village | Cow | | Buffalo | | Ox/ Bull | Goat | Sheep | Piggeries | Poultry | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Desi | Crossed | Desi | Murrah | | | | | Broiler | Layers | Total |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 209 | 20 | 125 | 6 | 18 | 780 | 25 | 6 | - | 23 | **1212** |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 143 | 10 | 79 | 8 | 19 | 520 | 26 | 5 | - | 26 | **836** |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 50 | 8 | 24 | 9 | 10 | 198 | 25 | 9 | - | 27 | **360** |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 282 | 15 | 162 | 7 | 21 | 1009 | 28 | 8 | - | 28 | **1560** |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 253 | 17 | 149 | 5 | 22 | 918 | 27 | 7 | - | 29 | **1427** |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 370 | 35 | 216 | 15 | 7 | 1377 | 29 | 4 | - | 24 | **2077** |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | 203 | 13 | 114 | 9 | 15 | 734 | 28 | 9 | - | 28 | **1153** |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 49 | 5 | 24 | 6 | 35 | 183 | 24 | 8 | - | 27 | **361** |
| 9 | Madauli Khurd | Gauri khera, | 202 | 14 | 115 | 8 | 16 | 734 | 26 | 6 | - | 29 | **1150** |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (2C1B2n1b) | Bahundari, Amara, Madauli Khurd | | | | | | | | | | | |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 235 | 21 | 139 | 7 | 23 | 872 | 28 | 5 | - | 26 | **1356** |
| | **Total** | | **1996** | **158** | **1147** | **80** | **186** | **7325** | **266** | **67** | - | **267** | **11492** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.11: Productivity of livestock in IWMP-XI, Banda**

| SN | Name of Micro watershed with code | Name of Village | Milk Production (Liter Per day) | | | | Goatry | Poultry | | Piggeries weight Kg/Pig |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cows | | Buffalos | | Weight in Kg/goat | Broiler Weight in Kg/ Brl | Layers No. of eggs/day | |
| | | | Desi | Crossed | Desi | Murrah | | | | |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 1.8 | 5.5 | 2.1 | 5.9 | 25.0 | - | 184 | - |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 1.6 | 5.1 | 2.6 | 5.4 | 27.0 | - | 180 | - |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 1.8 | 5.3 | 2.5 | 5.4 | 26.0 | - | 178 | - |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 1.2 | 5.1 | 2.4 | 5.1 | 22.0 | - | 169 | - |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 1.6 | 5.3 | 2.0 | 5.2 | 21.0 | - | 170 | - |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 1.3 | 5.7 | 2.1 | 5.4 | 25.0 | - | 189 | - |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | 1.2 | 5.5 | 2.6 | 5.6 | 24.0 | - | 184 | - |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 1.1 | 5.1 | 2.8 | 5.8 | 28.0 | - | 175 | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | 1.6 | 5.3 | 2.4 | 5.7 | 29.0 | - | 185 | - |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 1.2 | 5.2 | 2.7 | 5.6 | 21.0 | - | 165 | - |
| | **Average** | | **1.4** | **5.3** | **2.4** | **5.5** | **24.8** | - | **178** | - |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.6 Forest and Grassland

There is no grassland available in the project area, however, information on naturally generated/grown degraded forest is given in Table 3.12.

**Table 3.12: Forest, vegetative cover/grassland in IWMP-XI, Banda**

| Sr. No. | Name & Code of Micro watershed | Name of Village | Forest (Area ha) | | | Grassland (Area ha) | | Other vegetative cover (Area ha) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Reserve | Gram Samaj (Natural /Planted) | Total | Gram Samaj | Private | Gram Samaj | Private |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 8 | 9 |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | - | - | - | 5.13 | - | 2.11 | 0.88 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | - | - | - | 5.01 | - | 2.59 | 1.55 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | - | - | - | 4.77 | - | 2.66 | 1.76 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | - | - | - | 4.94 | - | 2.4 | 1.55 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | - | - | - | 4.33 | - | 2.53 | 1.52 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | - | - | - | 5.8 | - | 2.07 | 1.58 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | - | - | - | 3.83 | - | 2.4 | 2.37 |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | - | - | - | 5.57 | - | 2.53 | 1.58 |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | - | - | - | 5.79 | - | 2.76 | 1.74 |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | - | - | - | 5.32 | - | 5.26 | 2.15 |
| | **Total** | | | | | **50.49** | | **27.31** | **16.68** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**3.7 Livelihood Status**

Assestless/landless people earn their livelihood mainly from labour and *batai (share cropping)*. They about Rs. 3000/per month for share cropping. It is expected that their income will enhance due to watershed management as it will generate share cropping employment opportunity on sustainable basis. Intervention presently on piggeries, fisheries, black smithy and carpentry are not in practice. Livelihood status of landless, farmers and interventions based livelihood status are shown in Table 3.13, 3.14 and 3.15, respectively.

**Table 3.13: Livelihood Status of Landless People**

| Sr. No. | Name & Code of micro watershed | Name of Village | Name of Livelihood Activity | No. of house hold engaged | | | | Pre project Average Income/ Year | Desired Activities | Expected Income from desired activities Rs/Year | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sc | Other | Women | Total | | | | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | Labour/ Batai | 4 | 14.00 | 2 | 20 | 25,000-30,000 | The landless people can increase their income by adoting one | 50,000-55,000 | Income may be increased by about two times |
| 2 | Gauri Kalan | Gauri Kalan, | | 2 | 9.00 | 1 | 12 | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (2ClB2b2a) | Sikahula, Bahundari | | | | | | | or two activities of goatary, poultry, dairy, technical shop, general store, dona making, Rope making, etc. besides Batai/labour work | | |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | | 0 | 3.00 | 0 | 3 | | | | |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | | 4 | 17.00 | 2 | 23 | | | | |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | | 3 | 14.00 | 1 | 18 | | | | |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | | 6 | 21.00 | 3 | 30 | | | | |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | | 3 | 11.00 | 1 | 15 | | | | |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | | 0 | 3.00 | 0 | 3 | | | | |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | | 3 | 12.00 | 2 | 17 | | | | |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | | 4 | 16.00 | 2 | 22 | | | | |
| | **Total** | | | **29** | **120** | **14** | **163** | **25,000-30,000** | **-** | **50,000-55,000** | **-** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.14: Details of Livelihood Status of the Farmers**

| Sr. No. | Name & Code of micro watershed | Name of Village | Name of Livelihood Activity | No. of House hold engaged | | | | Pre project Average Income | Desired Activities | Expected Income from desired activities | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sc | Other | Women | Total | | | | |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | Agriculture + A.H., Labour, Batai | 98 | 367 | 25 | 490 | 40000-50000 | Productivity could be enhance through natural resource conservation, livestock management and micro-enterprises | 55,000-65,000 | Income may be increased by about 30 to 40 per cent |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | | 65 | 248 | 15 | 328 | | | | |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | | 25 | 96 | 6 | 127 | | | | |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | | 127 | 480 | 30 | 637 | | | | |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | | 116 | 439 | 27 | 582 | | | | |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | | 174 | 690 | 6 | 870 | | | | |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | | 93 | 348 | 24 | 465 | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | | 23 | 44 | 50 | 117 | | | | |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | | 92 | 347 | 24 | 463 | | | | |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | | 109 | 413 | 26 | 548 | | | | |
| | **Total** | | | **922** | **3472** | **233** | **4627** | **35000-45000** | **-** | **55,000-65,000** | **-** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.15: Present Livelihood Status (No. of households/Income per year) in IWMP-XI, Banda** 'Income in Rs

| Sr. No | Name of MWS with code | Name of village | Activities | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dairy | | Poultry | | Goatry | | Piggeries | | Fisheries | | Black Smithy | | Carpentry | | Stitching/ knitting | | Wages | | Agriculture | |
| | | | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income | No | Av. income |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 142 | 11,500-13,500 | 15 | 13,000-16,000 | 355 | 21000-35000 | 16 | 7500-9000 | - | - | 3 | 2000-4000 | 3 | 2500-4500 | - | - | 41 | 11,000-13,000 | 110 | 25,000-27,000 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 159 | | 12 | | 398 | | 22 | | - | | 5 | | 5 | | - | | 68 | | 165 | |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 15 | | 4 | | 35 | | - | | - | | - | | - | | - | | 15 | | 55 | |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 123 | | 18 | | 300 | | 14 | | - | | 2 | | 4 | | - | | 36 | | 102 | |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 130 | | 16 | | 325 | | 18 | | - | | 3 | | 3 | | - | | 38 | | 116 | |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 135 | | 17 | | 330 | | 13 | | - | | 3 | | 3 | | - | | 34 | | 121 | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Bhatha (2C1B2a3 h) | Jaspura, Bhatha, Nada Deo | 120 | | 16 | | 300 | | 16 | | - | | 6 | | 2 | | - | | 39 | | 115 | |
| 8 | Dhundh Pur (2C1B2c2 b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 18 | | 6 | | 45 | | - | | - | | - | | - | | - | | 12 | | 40 | |
| 9 | Madauli Khurd (2C1B2n1 b) | Gauri khera, Bahundari, Amara, Madauli Khurd | 132 | | 13 | | 330 | | 15 | | - | | 5 | | 4 | | - | | 35 | | 120 | |
| 10 | Kiswahi (2C1B2n1 e) | Kiswahi, Perehta | 124 | | 16 | | 310 | | 18 | | - | | 6 | | 6 | | - | | 42 | | 150 | |
| | **Total** | | **1098** | **11,500-13,500** | **133** | **13,000-16,000** | **2728** | **21000-35000** | **132** | **7500-9000** | **-** | **-** | **33** | **2000-4000** | **30** | **2500-4500** | **-** | **-** | **360** | **11,000-13,000** | **1094** | **25,000-27,000** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

### 3.8 Hydrology, Water resources and Soil and moisture Conservation

Shallow dug wells are the only means of irrigation in the area and these wells support only for life saving irrigation. In general, irrigation interval is short e to short due water holding capacity of the soils. For soil and water conservation only field bund exist presently Use of micro-irrigation is almost nil in the area. Groundwater status, irrigation status and source are given in Table 3.16, 3.17 and 3.18, respectively.

**Table 3.16: Ground Water Status in IWMP-XI, Banda**

| Sr. No. | Name & Code of Micro watershed | Name of Village | Depth of Ground Water Table (Below Ground level) in Meter | | No. of Observation well |
|---|---|---|---|---|---|
| | | | Before Monsoon | After Monsoon | |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | Avrg.13.80 | Avrg.11.50 | 06 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | Avrg.15.60 | Avrg.12.60 | 07 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | Avrg.14.15 | Avrg.11.20 | 06 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | Avrg.15.35 | Avrg.11.30 | 09 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | Avrg.13.20 | Avrg.11.40 | 07 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | Avrg.14.85 | Avrg.12.30 | 08 |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | Avrg.13.95 | Avrg.11.65 | 05 |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | Avrg.14.40 | Avrg.10.85 | 08 |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | Avrg.15.75 | Avrg.11.30 | 09 |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | Avrg.13.65 | Avrg.10.35 | 06 |
| | **Average** | | **13.20-15.75** | **10.35-12.60** | |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

Generally stony layer is observed at a depth ranging between 1-5 m in all districts of Bundelkhand in Uttar Pradesh except Jalaun and Hamirpur district. Depth of water table in open shallow dug wells in the project area was about 13 to 16 m during pre monsoon, however it was in the range of 10-13 m during post monsoon season.

**Table 3.17: Irrigation Status in IWMP-XI, Banda**

| Sr. No. | Name & Micro Watershed with code | Name of Village | Gross Cultivated Area | | | | Net Cultivated Area | Gross Irrigated Area | | | | Net Irrigated Area | Rainfed Area |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Kharif | Rabi | Zaid | Total | | Kharif | Rabi | Zaid | Total | | |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 213.77 | 382.08 | - | 595.85 | 561.25 | 45.36 | 72.50 | - | 117.86 | 117.86 | 443.39 |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | 142.93 | 257.19 | - | 400.12 | 383.33 | 32.57 | 47.93 | - | 80.50 | 80.50 | 302.83 |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | 60.23 | 115.91 | - | 176.14 | 163.60 | 13.26 | 21.10 | - | 34.36 | 34.36 | 129.24 |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | 285.44 | 525.94 | - | 811.38 | 747.59 | 68.35 | 88.64 | - | 156.99 | 156.99 | 590.59 |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | 264.11 | 480.26 | - | 744.37 | 652.42 | 48.29 | 88.72 | - | 137.01 | 137.01 | 515.42 |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | 426.05 | 900.67 | - | 1326.72 | 1166.04 | 95.36 | 149.51 | - | 244.87 | 244.87 | 921.17 |
| 7 | Bhatha | Jaspura, | 228.98 | 371.81 | - | 600.79 | 565.78 | 48.58 | 70.23 | - | 118.81 | 118.81 | 446.97 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (2C1B2a3h) | Bhatha, Nada Deo | | | | | | | | | | | |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | 56.81 | 102.04 | - | 158.85 | 151.04 | 10.35 | 21.37 | - | 31.72 | 31.72 | 119.32 |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | 238.31 | 360.97 | - | 599.28 | 561.33 | 39.68 | 78.20 | - | 117.88 | 117.88 | 443.45 |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 253.13 | 395.08 | - | 648.21 | 614.18 | 48.39 | 80.59 | - | 128.98 | 128.98 | 485.20 |
| | **Total** | | **2169.76** | **3891.95** | - | **6061.71** | **5566.57** | **450.19** | **718.79** | - | **1168.98** | **1168.98** | **4397.59** |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

**Table 3.18: Source wise Area Irrigated in IWMP-XI, Banda (area in ha)**

| Sr. No. | Name &Micro watershed with code | Name of Village | Canal Area | State Tube wells | | Tanks | | Open well | | Bore wells | | Lift irrigation | | Others (Specify) | | Total Irrigated Area | Rem. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | No. | Area | No. | Area | No. | Area | No. | Area | No. | Area | No. | Area | | |
| 1 | Narjita (2ClB2b3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | - | - | - | 8 | 17.68 | 30 | 70.72 | 3 | 9.43 | - | 20.04 | - | - | 117.86 | - |
| 2 | Gauri Kalan (2ClB2b2a) | Gauri Kalan, Sikahula, Bahundari | - | - | - | 5 | 12.08 | 20 | 48.30 | 2 | 6.44 | - | 13.69 | - | - | 80.50 | - |
| 3 | Gadariya (2C1B2c1d) | Terha, Gadariya | - | - | - | 2 | 5.15 | 5 | 20.61 | 3 | 2.75 | - | 5.84 | - | - | 34.36 | - |
| 4 | Birkhera (2C1B2c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | - | - | - | 10 | 23.55 | 48 | 94.20 | 4 | 12.56 | - | 26.69 | - | - | 156.99 | - |
| 5 | Jaspura (2C1B2b1b) | Gauri Kalan, Jaspura, Amara | - | - | - | 9 | 20.55 | 40 | 82.21 | 3 | 10.96 | - | 23.29 | - | - | 137.01 | - |
| 6 | Terha (2C1B2c1e) | Terha, Gadariya | - | - | - | 16 | 36.73 | 55 | 146.92 | 1 | 19.59 | - | 41.63 | - | - | 244.87 | - |
| 7 | Bhatha (2C1B2a3h) | Jaspura, Bhatha, Nada Deo | - | - | - | 8 | 17.82 | 35 | 71.29 | 3 | 9.51 | - | 20.20 | - | - | 118.81 | - |
| 8 | Dhundh Pur (2C1B2c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, | - | - | - | 2 | 4.76 | 7 | 19.03 | 1 | 2.54 | - | 5.39 | - | - | 31.72 | - |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Padhauli, Badanpur, Gauri | | | | | | | | | | | | | | | |
| 9 | Madauli Khurd (2C1B2n1b) | Gauri khera, Bahundari, Amara, Madauli Khurd | - | - | - | 8 | 17.68 | 31 | 70.73 | 3 | 9.43 | - | 20.04 | - | - | 117.88 | - |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | - | - | - | 9 | 19.35 | 36 | 77.39 | 4 | 10.32 | - | 21.93 | - | - | 128.98 | - |
| | **Total** | | - | - | - | **77** | **175.35** | **307** | **701.39** | **27** | **93.52** | - | **198.73** | - | - | **1168.98** | - |

*(Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Banda-I, Banda, U.P.*)

# CHAPTER – 4

## INSTITUTIONAL BUILDING AND PROJECT MANAGEMENT

### 4.1 Project Implementing Agency

The Project Implementing Agency (PIA) is Soil Conservation Officer, Department of Agriculture, IWMP-XI, Banda-I, Banda, Uttar Pradesh. The PIA was given responsibility to develop the micro-watershed by Watershed Cell cum Data Centre (WCDC) and State Level Nodal Agency (SLNA) considering its vast experiences in handling land and water management issues in the region. The PIA has well experienced trained and sufficient staff to handle the watershed management programme efficiently. Most of the staff of PIA has exposure of several watershed projects. In addition the PIA has access for technical backstopping from the ICAR viz. IGFRI and NRCAF at Jhansi and KVK located at Banda. Details of PIA are presented in subsequent section.

**Table 4.1: Details of Project Implementing Agency (PIA), IWMP-XI, Banda**

| Sr. No. | Particulars of PIA | |
|---|---|---|
| **(i)** | Date of selection of PIA | |
| **(ii)** | Type of organization | U.P. Government |
| **(iii)** | Name of organization | Soil Conservation Division, Deptt. of Agriculture |
| **(iv)** | Principal Implementing Agency & Address | Soil Conservation Officer, Banda-I |
| **(v)** | Telephone | |
| **(vi)** | Fax | |
| **(vii)** | E-mail | |

**Table 4.2: Details of Staff at PIA, IWMP- XI**

| Sr. No. | Designation | Name | M/F | Qualification | Field of Experience & Period | Remarks |
|---|---|---|---|---|---|---|
| **1** | B.S.A. | Shri. S.C. Ahirwar | M | Civil Eng. | All the staff are experienced and wellworsed with watershed management | |
| **2** | S.T.A | Shri.Madan Mohan Tiwari | M | Civil Eng. | | |
| **3** | J.E. | Shri. M.P.Singh | M | Civil Eng. | | |
| **4** | S.T.A | Shri.Om Veer Singh | M | Ag. Diploma | | |
| **5** | S.T.A | Shri Balveer singh | M | B.Sc. Ag. | | |
| **6** | S.T.A | Shri Raj Veer Singh | M | Ag. Diploma | | |
| **7** | S.T.A | Shri. Mahak Singh | M | Ag. Diploma | | |
| **8** | S.T.A | Shri. Ram Sanehi Singh | M | B.Sc.. Ag. | | |
| **9** | T.A | Shri. Ram Singh | M | B.Sc.. Ag. | | |
| **10** | T.A | Shri. Nareshpal Singh | M | Inter collage (Ag. Diploma) | | |
| **11** | T.A | Shri. Phulena Yadav | M | B.Sc.. Ag. | | |
| **12** | T.A | Shri. Chhotelal | M | Ag. Diploma | | |
| **13** | T.A | Shri. S.N. Katiya | M | Ag. Diploma | | |
| **14** | T.A | Shri. Jawaharlal Gupta | M | B.Sc.. Ag. | | |
| **15** | T.A | Shri. Jageshwar Gupta | M | B.Sc.. Ag. | | |
| **16** | T.A | Shri. Bhisham Tiwari | M | Ag. Diploma | | |
| **17** | T.A | Shri. Shant Sharn Tiwari | M | B.Sc.. Ag. | | |
| **18** | T.A | Shri. Mahendra Yadav | M | M.Sc. Ag | | |

**Table 4.3: Details of Watershed Development Team (WDT) in the project area**

**Project- IWMP-XI PIA- BSA, Banda-I District-Banda**

| Sr. No. | Name of WDT member | M/F | Age | Qualification / Experience | Description of professional training | Role/ Function | Date of appointment of WDT member |
|---|---|---|---|---|---|---|---|
| **1.** | Shri Mahak Singh | M | 57 | Ag. Diploma | All the members are having work experience of watershed management. | WDT members will be accountable for the activities mentioned in Common Guidelines for watershed Development Projects 2008 | 18.9.11 |
| **2.** | Shri Jageshawar Gupta | M | 55 | B.Sc. (Ag) | | | |
| **3.** | Shri. Mahendra Pratap Yadav | M | 57 | B.Sc. (Ag) | | | |

**Table 4.4: Details of Watershed Committee (WC)**
**Jal Sanrakshan Samiti- Gadariya, Gram Panchayat: Gadariya Name of Project:- IWMP XI**
**District- Banda**

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function(s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Gadariya | 10.10.11 | President | M | - | - | Y | - | - | - | - | - | - | - | Y | $5^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | - | Y | - | - | - | - | - | - | - | $10^{TH}$ | |
| | | | Team leader | M | Y | - | - | - | - | Y | - | - | Y | - | - | Diploma Ag | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | Y | - | - | Y | - | $5^{TH}$ | |
| | | | Member | F | - | - | Y | - | Y | - | - | - | Y | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | - | Y | - | Y | $5^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | - | - | - | - | $8^{TH}$ | |

Male-M, Female-F, Schedule caste- SC, Schedule tribe- ST, Other backward clan- OBC, General- Gen, Small farmer- SF, Medium farmer-MF, Large farmer- LF, User Group- UG, Self help Group-SHG, Gram Panchayat Member- GP

**Jal Sanrakshan Samiti- Sikahula, District- Banda** **Gram Panchayat: Sikahula** **Name of Project:- IWMP XI**

| Sl. No. | Name of Gram Sabha / GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | Sikahula | 13.10.11 | President | M | - | - | Y | - | - | - | Y | - | - | - | - | $5^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | - | Y | Y | - | - | - | - | - | - | B.A | |
| | | | Team Leader | M | Y | - | - | - | Y | - | - | - | - | - | - | B.Sc AG | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | M | - | - | - | - | - | - | Y | - | - | - | - | $8^{TH}$ | |
| | | | Member | F | - | - | - | Y | Y | Y | - | - | - | Y | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | | Y | - | - | - | - | Y | - | $8^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | Y | - | Y | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | - | - | - | Y | - | Y | $5^{TH}$ | |

**Jal Sanrakshan Samiti- Narjita, District- Banda** **Gram Panchayat: Narjita** **Name of Project:- IWMP XI**

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | SC | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | Narjita | 11.10.11 | President | - | - | - | Y | - | Y | - | - | - | - | - | - | $5^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | - | - | Y | | - | Y | - | - | Y | - | - | - | B.A | |
| | | | Team leader | - | - | - | Y | - | - | - | - | - | - | - | - | B.Sc AG | |
| | | | Member | - | - | - | Y | - | Y | - | - | Y | - | - | - | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | Y | - | - | - | - | - | - | Y | - | Y | - | Y | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | - | - | Y | - | Y | - | - | $8^{TH}$ | |
| | | | Member | Y | - | - | - | Y | - | - | - | Y | - | - | Y | $5^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | - | - | Y | - | Y | - | - | - | Y | - | - | - | $5^{TH}$ | |

**Jal Sanrakshan Samiti- Gaurikala, District- Banda** **Gram Panchayat: Gaurikala** **Name of Project:- IWMP XI**

| Sl. No. | Name of Gram Sabha / GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Gaurikala | 28.10.11 | President | M | Y | - | - | - | - | Y | - | - | - | - | Y | $8^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | - | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | Y | - | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | Y | - | Y | - | - | $8^{TH}$ | |
| | | | Member | F | - | - | - | - | - | - | - | Y | - | Y | - | $8^{TH}$ | |
| | | | Member | M | Y | - | - | - | Y | - | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | Y | - | - | $5^{TH}$ | |
| | | | Member | F | Y | - | - | - | - | - | - | Y | - | Y | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | Y | - | - | - | - | - | $8^{TH}$ | |

**Jal Sanrakshan Samiti- Sikuva, Gram Panchayat: Sikuva Name of Project:- IWMP XI**
**District- Banda**

| Sl. No. | Name of Gram Sabha / GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Sikuva | 29.10.11 | President | M | - | - | - | Y | - | Y | - | - | - | - | - | $10^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | - | Y | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | - | Y | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | B.A | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | Y | - | Y | - | $5^{TH}$ | |
| | | | Member | F | Y | - | - | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |

**Jal Sanrakshan Samiti- Jaspura, Gram Panchayat: Jaspura Name of Project:- IWMP XI**
**District- Banda**

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Jaspura | 28.10.11 | President | M | - | - | - | Y | - | Y | - | - | Y | - | Y | $12^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | - | - | Y | - | - | - | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | Y | - | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | Y | - | - | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | - | Y | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | F | - | - | Y | - | - | - | - | Y | - | Y | - | $10^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | Y | - | - | $5^{TH}$ | |

**Jal Sanrakshan Samiti- Amara, District- Banda** **Gram Panchayat: Amara** **Name of Project:- IWMP X I**

| Sl. No. | Name of Gram Sabha / GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Amara | 29.10.11 | President | M | - | - | - | Y | - | Y | - | - | - | - | - | $10^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | - | Y | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | - | Y | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | B.A | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | Y | - | Y | - | $5^{TH}$ | |
| | | | Member | F | Y | - | - | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |

**Jal Sanrakshan Samiti- Nadadev, Gram Panchayat: Nadadev Name of Project:- IWMP XI**
**District- Banda**

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | SC | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Nadadev | 11.10.11 | President | - | - | - | Y | - | Y | - | - | - | - | - | - | $5^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | - | - | Y | | - | Y | - | - | Y | - | - | - | B.A | |
| | | | Team leader | - | - | - | Y | - | - | - | - | - | - | - | - | B.Sc AG | |
| | | | Member | - | - | - | Y | - | Y | - | - | Y | - | - | - | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | Y | - | - | - | - | - | - | Y | - | Y | - | Y | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | - | - | Y | - | - | - | - | Y | - | Y | - | - | $8^{TH}$ | |
| | | | Member | Y | - | - | - | Y | - | - | - | Y | - | - | Y | $5^{TH}$ | |
| | | | Member | - | - | Y | - | - | Y | - | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | - | - | Y | - | Y | - | - | - | Y | - | - | - | $5^{TH}$ | |

**Jal Sanrakshan Samiti- Padohara, Gram Panchayat: Padohara Name of Project:-**
**IWMP XI District- Banda**

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | Padohara | 28.10.11 | President | M | - | - | - | Y | - | Y | - | - | Y | - | Y | $12^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | - | - | Y | - | - | - | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | Y | - | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | Y | - | - | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | - | - | Y | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | - | Y | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | F | - | - | Y | - | - | - | - | Y | - | Y | - | $10^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | Y | - | - | $5^{TH}$ | |

**Jal Sanrakshan Samiti- Madauli Khurd, District- Banda** **Gram Panchayat: Madauli Khurd** **Name of Project:- IWMP X I**

| Sl. No. | Name of Gram Sabha / GP | Date of Constitution/ Registration as a Society (dd/mm/ yyyy) | Designation | M/ F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function (s) assigned |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Madauli Khurd | 29.10.11 | President | M | - | - | - | Y | - | Y | - | - | - | - | - | $10^{TH}$ | WC will act as per Common Guidelines for watershed Development Projects 2008 |
| | | | Secretary | M | - | - | Y | | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Team leader | M | - | - | - | Y | - | - | - | - | - | - | - | Diploma Ag | |
| | | | Member | M | - | - | - | Y | - | Y | - | - | Y | - | - | $10^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $10^{TH}$ | |
| | | | Member | M | Y | - | - | - | - | - | - | Y | - | Y | - | B.A | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $5^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | - | - | Y | - | Y | - | $5^{TH}$ | |
| | | | Member | F | Y | - | - | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | - | Y | - | - | - | - | - | $8^{TH}$ | |
| | | | Member | M | - | - | Y | - | Y | - | - | - | Y | - | - | $8^{TH}$ | |

**Table 4.5: Village wise details of Self Help Groups (SHGs) in the project area IWMP- XI**

**Project- IWMP XI** **District – Banda**

| Sr. No. | Name of MWS | Names of villages | Total no. of Constituted/registered SHGs | | | | No. of members | | | | No. of SC/ST in each category | | | No. of BPL in each category | | | Date of formation of SHGs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | With only Men | With only Women | With both | Total | Categories | M | F | Total | M | F | Total | M | F | Total | |
| 1 | Narjita (2ClB2b 3a) | Sikahula, Narjita, Gauri Kalan, Gadariya, Sikuwa, Bahundari | 4 | 1 | 2 | 7 | (i) Landless | 7 | 3 | 10 | 3 | 0 | 3 | 7 | 3 | 10 | These SHGs were formed during the month of February to April. Bye-laws of the SHGs were prepared and kept in the project file. |
| | | | | | | | (ii) SF | 16 | 9 | 25 | 4 | 2 | 6 | 16 | 9 | 25 | |
| | | | | | | | (iii) MF | 23 | 12 | 35 | 7 | 4 | 11 | 23 | 12 | 35 | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | **Total** | **46** | **24** | **70** | **14** | **6** | **20** | **46** | **24** | **70** | |
| 2 | Gauri Kalan (2ClB2b 2a) | Gauri Kalan, Sikahula, Bahundari | 3 | 1 | 1 | 5 | (i) Landless | 8 | 2 | 10 | 0 | 0 | 0 | 8 | 2 | 10 | |
| | | | | | | | (ii) SF | 12 | 4 | 16 | 2 | 1 | 3 | 12 | 4 | 16 | |
| | | | | | | | (iii) MF | 17 | 7 | 24 | 5 | 2 | 7 | 17 | 7 | 24 | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | **Total** | **37** | **13** | **50** | **7** | **3** | **10** | **37** | **13** | **50** | |
| 3 | Gadariya (2C1B2 c1d) | Terha, Gadariya | 1 | 0 | 0 | 1 | (i) Landless | 0 | 0 | 0 | - | - | - | 0 | 0 | 0 | |
| | | | | | | | (ii) SF | 3 | 0 | 3 | - | - | - | 3 | 0 | 3 | |
| | | | | | | | (iii) MF | 7 | 0 | 7 | - | - | - | 7 | 0 | 7 | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | **Total** | **10** | **0** | **10** | **0** | **0** | **0** | **10** | **0** | **10** | |
| 4 | Birkhera (2C1B2 c1c) | Terha, Gadariya, Birkhera, Dhundh Pur | - | - | - | - | (i) Landless | - | - | - | - | - | - | - | - | - | |
| | | | | | | | (ii) SF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | (iii) MF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Total** | - | - | - | - | - | - | - | - | - | Process to open the accounts in Gram in bank (service bank) has been iniated |
| 5 | Jaspura (2C1B2 b1b) | Gauri Kalan, Jaspura, Amara | 4 | 2 | 2 | 8 | (i) Landless | 7 | 3 | 10 | 4 | 0 | 4 | 7 | 3 | 10 | | |
| | | | | | | | (ii) SF | 18 | 8 | 26 | 7 | 2 | 9 | 18 | 8 | 26 | | |
| | | | | | | | (iii) MF | 31 | 13 | 44 | 12 | 5 | 17 | 31 | 13 | 44 | | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | **Total** | **56** | **24** | **80** | **23** | **7** | **30** | **56** | **24** | **80** | | |
| 6 | Terha (2C1B2 c1e) | Terha, Gadariya | 5 | 2 | 2 | 9 | (i) Landless | 16 | 3 | 19 | 3 | 1 | 4 | 16 | 3 | 19 | | |
| | | | | | | | (ii) SF | 21 | 8 | 29 | 7 | 2 | 9 | 21 | 8 | 29 | | |
| | | | | | | | (iii) MF | 29 | 13 | 42 | 12 | 5 | 17 | 29 | 13 | 42 | | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | **Total** | **66** | **24** | **90** | **22** | **8** | **30** | **66** | **24** | **90** | | |
| 7 | Bhatha (2C1B2 a3h) | Jaspura, Bhatha, Nada Deo | 3 | 1 | 1 | 5 | (i) Landless | 5 | 3 | 8 | 0 | 0 | 0 | 5 | 3 | 8 | | |
| | | | | | | | (ii) SF | 12 | 6 | 18 | 3 | 0 | 3 | 12 | 6 | 18 | | |
| | | | | | | | (iii) MF | 15 | 9 | 24 | 5 | 2 | 7 | 15 | 9 | 24 | | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | **Total** | **32** | **18** | **50** | **8** | **2** | **10** | **32** | **18** | **50** | | |
| 8 | Dhundh Pur (2C1B2 c2b) | Bir Khera, Dhundh Pur, Mauthar, Atraia, Padhauli, Badanpur, Gauri | - | - | - | - | (i) Landless | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | (ii) SF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | (iii) MF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | **Total** | - | - | - | - | - | - | - | - | - | | |
| 9 | Madauli Khurd (2C1B2 n1b) | Gauri khera, Bahundari, Amara, Madauli | 3 | 1 | 2 | 6 | (i) Landless | 10 | 2 | 12 | 2 | 0 | 2 | 10 | 2 | 12 | | |
| | | | | | | | (ii) SF | 13 | 6 | 19 | 5 | 2 | 7 | 13 | 6 | 19 | | |
| | | | | | | | (iii) MF | 18 | 11 | 29 | 8 | 3 | 11 | 18 | 11 | 29 | | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Khurd | | | | | **Total** | **41** | **19** | **60** | **15** | **5** | **20** | **41** | **19** | **60** | |
| 10 | Kiswahi (2C1B2n1e) | Kiswahi, Perehta | 4 | 1 | 2 | 7 | (i) Landless | 8 | 4 | 12 | 2 | 0 | 2 | 8 | 4 | 12 | |
| | | | | | | | (ii) SF | 13 | 7 | 20 | 6 | 1 | 7 | 13 | 7 | 20 | |
| | | | | | | | (iii) MF | 24 | 14 | 38 | 9 | 2 | 11 | 24 | 14 | 38 | |
| | | | | | | | (iv) LF | - | - | - | - | - | - | - | - | - | |
| | | | | | | | **Total** | **45** | **25** | **70** | **17** | **3** | **20** | **45** | **25** | **70** | |
| | **Grand Total** | | **27** | **9** | **12** | **48** | | **333** | **147** | **480** | **106** | **34** | **140** | **333** | **147** | **480** | |

(M – Male, F – Female)

There are 25 villages in the project area and village-wise Self Help Groups (SHGs) constituted is given in Table 4.5. A total 48 SHGs were already constituted in the project villages, of them 27 men SHGs, 9 women SHGs and 12 mixed SHGs, respectively. Total 161 SHGs have to be constituted to ensure the livelihood of marginalized population in the project. Formation of remaining 113 SHGs is in progress. Livelihood Action Plan is given in Annexure-I.

**4.2: Details of Formation of User Groups (UGs)**

User Groups were formed on the basis of beneficiaries of different natural resource conservation activities to be constructed in the watershed. The location of the activities/group mentioned in Table 4.6 can be seen on the proposed plan available in the map section.

**Table 4.6: Activity wise formation of user groups**

| Name of Work | Benefited area (ha) | Field No. | Name of Adhyaksh | Name of Sachiv/ Treasurer | Activity Proposed | Location of the activity | Water storage in cum | Area Proposed for irrigation (ha) | user Charges (per ha) |
|---|---|---|---|---|---|---|---|---|---|
| **Birkhera (2C1B2c1c)** | | | | | | | | | |
| CD1 | 10.16 | 2730 to 33, 36, 45, 46 | Ram Kishor | Devi Dayal | Crop Production | 2730 | - | - | - |
| CD2 | 11.16 | 2713, 24 to28, 45 | | Gangva | Crop Production | 2713 | - | - | - |
| CD3 | 11.16 | 2779, 80, 81, 89, 92, 23, 40, 53 | Bhagvati Prasad | Kamlesh Prasad | Crop Production | 2779 | - | - | - |
| CD4 | 12.76 | 2771 to 2775, 2227/1 | Bhagvati Prasad | Lakhan Singh | Crop Production | 2771 | - | - | - |
| CD5 | 12.76 | 2880, 79, 78, 81, 86, 88 | Hari Narayan | Shymaliya | Crop Production | 2880 | - | - | - |
| CD6 | 11.16 | 2945, 46, 65, 66 | Hari Narayan | Shir Chunkan | Crop Production | 2945 | - | - | - |
| CD7 | 11.16 | 2952, 54, 55, 49 | Bodi Singh | Govind | Crop Production | 2952 | - | - | - |
| CD8 | 10.16 | 1885, 86, 8900, 92 | Raghuraj | Bacchi | Crop Production | 1885 | - | - | - |
| CD9 | 11.16 | 1860, 65, 71, 72 | Doli | Lakhan Singh | Crop Production | 1860 | - | - | - |
| CD10 | 11.16 | 1827/1, 5, 25, 26 | Bhola | Foolchandra | Crop Production | 1827/1 | - | - | - |
| CD11 | 11.16 | 1831/1, 1802/3, 182/3 | Harpal | Sanjeev | Crop Production | 1831/1 | - | - | - |
| CD12 | 12.76 | 1270, 72, 74 | Harpal | Shiv Kumar | Crop Production | 1270 | - | - | - |
| CD13 | 10.16 | 370, 71, 72 | Ram Kishor | Nathuva | Crop Production | 370 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| CD14 | 10.16 | 497 to 501, 471 | Bhagvati Prasad | Shivram | Crop Production | 497 | - | - | - |
| CD15 | 10.16 | 803, 27, 26, 48, 88, 89 | Raghuraj | Bacchu | Crop Production | 803 | - | - | - |
| CD16 | 10.16 | 808, 6, 7, 4, 25, 26 | Raghuraj | Krishn | Crop Production | 808 | - | - | - |
| CD17 | 10.16 | 1377, 76, 1594, 88, 89 | Shivraniya | Ramasre | Crop Production | 1377 | - | - | - |
| CD18 | 11.16 | 1386, 1428, 1573, 1377, 1380 | Boda | Natthu | Crop Production | 1386 | - | - | - |
| CD19 | 11.16 | 1418/2, 20, 22, 1388/2, 1389/2 | Boda | Sitaram | Crop Production | 1418/2 | - | - | - |
| CD20 | 10.16 | 838, 1553, 839, 40, 41 | Shivraniya | Gaurishankar | Crop Production | 838 | - | - | - |
| CD21 | 12.76 | 1739 to 1780 | Shivraniya | Mariya | Crop Production | 1739 | - | - | - |
| CD22 | 12.76 | 1270 | Jolav | Chandrpal | Crop Production | 1270 | - | - | - |
| CD23 | 11.16 | 1795, 97, 98, 92 | Jolav | Nandu | Crop Production | 1795 | - | - | - |
| CD24 | 10.32 | 1274, 1276/1 | Bhola | Binda | Crop Production | 1274 | - | - | - |
| WHB1 | 35 | 1272 | Ghaseeta | Raghuveer | Crop Production | 1272 | - | - | - |
| WHB2 | 36 | 1270 | Ramadhar | Rakesh | Crop Production | 1270 | - | - | - |
| WHB3 | 37 | 1278 | Dulichandra | Cheduva | Crop Production | 1278 | - | - | - |
| **Terha (2C1B2c1e)** | | | | | | | | | |
| CD1 | 16.4 | 585, 595 | Ganga Prasad | Jolav | Crop Production | 585 | - | - | - |
| CD2 | 16.3 | 716, 715/1, 718/1 | Daya Shankar | Jolav | Crop Production | 716 | - | - | - |
| CD3 | 20.7 | 730/1, 748/1 | Kaluva | Bhola | Crop Production | 730/1 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| WHB1 | 25.6 | 176/4, 2085 | Ramlal | Boda | Crop Production | 176/4 | - | - | - |
| **Gadariya (2C1B2c1d)** | | | | | | | | | |
| CD1 | 13 | 2049, 2042 | Ramsajeevan | Shymaliya | Crop Production | 2049 | - | - | - |
| CD2 | 13.1 | 1953, 1955 | Bajrangi | Shir Chunkan | Crop Production | 1953 | - | - | - |
| CD3 | 15.4 | 2016, 2050 | Gariba | Govind | Crop Production | 2016 | - | - | - |
| CD4 | 15.5 | 1946, 1914 | Gajraj | Bacchi | Crop Production | 1946 | - | - | - |
| **Gauri Kalan (2C1B2b2a)** | | | | | | | | | |
| CD1 | | 840 | Ram Vilas | Bhagvati Prasad | Crop Production | 840 | - | - | - |
| CD2 | | 796 | Barij Lal | Bhagvati Prasad | Crop Production | 796 | - | - | - |
| CD3 | | 784 | Suraj Prasad | Hari Narayan | Crop Production | 784 | - | - | - |
| CD4 | | 785 | Hira Lal | Hari Narayan | Crop Production | 785 | - | - | - |
| CD5 | | 787 | Kallu | Bodi Singh | Crop Production | 787 | - | - | - |
| CD6 | | 795 | Ghasva | Raghuraj | Crop Production | 795 | - | - | - |
| CD7 | | 840 | Ram Vikas | Doli | Crop Production | 840 | - | - | - |
| CD8 | | 795 | Dashva | Bhola | Crop Production | 795 | - | - | - |
| CD9 | | 1007 | Ram Babu | Harpal | Crop Production | 1007 | - | - | - |
| CD10 | | 1269 | Ramautar | Harpal | Crop Production | 1269 | - | - | - |
| CD11 | | 1259 | Ramsewak | Ram Kishor | Crop Production | 1259 | - | - | - |
| CD12 | | 1272 | Jagdish | Bhagvati | Crop | 1272 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| | | | Narayan | Prasad | Production | | | | |
| WHB1 | | 1254 | Ramcharan | Raghuraj | Crop Production | 1254 | - | - | - |
| WHB2 | | 795 | Ramasre | Raghuraj | Crop Production | 795 | - | - | - |
| **Bhatha (2C1B2a3h)** | | | | | | | | | |
| CD1 | 18.4 | 2414, 2417 | Gajva | Amarjeet | Crop Production | 2414 | - | - | - |
| CD2 | 23.2 | 2448, 2446 | Kamta | Rajaram | Crop Production | 2448 | - | - | - |
| CD3 | 25.6 | 2450, 2444 | Ramasre | Ramakant | Crop Production | 2450 | - | - | - |
| CD4 | 18.2 | 2485, 2486 | Surja | Dayashnkar | Crop Production | 2485 | - | - | - |
| CD5 | 18.2 | 2612, 2613 | Rammilan | Muluva | Crop Production | 2612 | - | - | - |
| CD6 | 29.6 | 2580, 2581 | Ram Snehi | Rajaram | Crop Production | 2580 | - | - | - |
| CD7 | 18.9 | 2555, 2554 | Padma | Rajaram | Crop Production | 2555 | - | - | - |
| CD8 | 19.3 | 1274, 1275, 1278 | Dinesh | Ramakant | Crop Production | 1274 | - | - | - |
| CD9 | 18.8 | 1384, 1385 | Rmanarayan | Amarjeet | Crop Production | 1384 | - | - | - |
| CD10 | 30.6 | 1455, 1456 | Shiv Prasad | Deshraj Singh | Crop Production | 1455 | - | - | - |
| CD11 | 25.4 | 1456, 1463, 1500 | Ramnarayan | Ramnath | Crop Production | 1456 | - | - | - |
| WHB1 | 77.2 | 2471, 2772 | Shiv Charan | Mahaveer | Crop Production | 2471 | - | - | - |
| **Madauli (2C1B2n1b)** | | | | | | | | | |
| CD1 | 6.7 | 387, 389, 390, 392, 393 | Jamuniya | Ramratan Singh | Crop Production | 387 | - | - | - |
| CD2 | 6.68 | 385, 393 to 395 | Jamuniya | Ramratan Singh | Crop Production | 385 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| CD3 | 5.69 | 399, 400, 402, 403, 405 | Jaggu | Jagdish | Crop Production | 399 | - | - | - |
| CD4 | 8 | 401, 4014, 505, 507, 410, 411 | Bhaiyadeen | Bhoora | Crop Production | 411 | - | - | - |
| CD5 | 7.09 | 367, 383, 405, 408, 409 | Lallu | Uditnarayan | Crop Production | 409 | - | - | - |
| CD6 | 8.18 | 282, 283, 285, 277, 313 | Babu Lal | Chunbad | Crop Production | 282 | - | - | - |
| CD7 | 7.5 | 368, 369, 377 to 381 | Baccha | Shivram | Crop Production | 368 | - | - | - |
| CD8 | 8.59 | 438 to 442, 369, 373, 376 | Natthu | Shivram | Crop Production | 438 | - | - | - |
| CD9 | 9.97 | 1747, 1764 to 1767 | Hardayal Pratap | Ratifal | Crop Production | 1747 | - | - | - |
| CD10 | 10.49 | 2513, 2515 | Bhoora | Shiv | Crop Production | 2513 | - | - | - |
| CD11 | 9.09 | 2531, 2541, 2557 to 2561 | Dev Pratap | Devideen | Crop Production | 2531 | - | - | - |
| CD12 | 10.04 | 2531 to 2533, 2536, 2543, 2541 to 2542 | Shivram | Babu | Crop Production | 2531 | - | - | - |
| CD13 | 10.47 | 253, 2544 | Kuldeep Singh | Shivram | Crop Production | 253 | - | - | - |
| CD14 | 10.35 | 689 to 692, 1740, 1747 to 1754 | Rmabhavan | Kunvar Bahadur | Crop Production | 689 | - | - | - |
| CD15 | 10.4 | 687 to 689, 695 to 697, 1737 | Prahlad | Shiv Lal | Crop Production | 687 | - | - | - |
| CD16 | 11.3 | 2524, 2495 | Sukhnandan | Jagroop | Crop Production | 2524 | - | - | - |
| CD17 | 13 | 2522, 2529 | Samarjeet | Sabhajeet | Crop Production | 2522 | - | - | - |
| CD18 | 12.42 | 2520, 2529 | Sabhajeet | Samrjeet | Crop Production | 2520 | - | - | - |
| CD19 | 10 | 1396, 1397 | Vardani | Ramgopal | Crop Production | 1396 | - | - | - |
| CD20 | 11.36 | 1184, 1371 | Hira Lal | Ballu | Crop Production | 1184 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| CD21 | 11.58 | 1184, 1371 | Shivkaran | Hira Lal | Crop Production | 1184 | - | - | - |
| CD22 | 10.58 | 1191, 1362 | Bhiya Lal | Bacchi | Crop Production | 1191 | - | - | - |
| CD23 | 10.45 | 1193, 1361 | Bhiyadeen | Swamideen | Crop Production | 1193 | - | - | - |
| CD24 | 10.95 | 1211, 1352, 1357 | Virendra Singh | Jaswant | Crop Production | 1211 | - | - | - |
| CD25 | 13.4 | 2518, 2530 | Ram Kumari | Gyan Babu | Crop Production | 2518 | - | - | - |
| CD26 | 12.9 | 1344, 1211, 1147 | Vijay | Jaswant | Crop Production | 1344 | - | - | - |
| CD27 | 11.4 | 1209 to 1213 | Savitri | Jaswant | Crop Production | 1209 | - | - | - |
| CD28 | 11.35 | 1341, 1220 | Ramnaresh | Brij Kishor | Crop Production | 1341 | - | - | - |
| CD29 | 13.05 | 2534, 1794 | Ramvishal | Shivram | Crop Production | 2534 | - | - | - |
| CD30 | 12.3 | 1662, 1669 | Chunbaad | Avadh Bihari | Crop Production | 1662 | - | - | - |
| CD31 | 13.15 | 1555, 1701 | Pratap Singh | Samrjeet | Crop Production | 1555 | - | - | - |
| WHB1 | 15.88 | 1648, 1659 | Shiv Lal | Raghuraj | Crop Production | 1648 | - | - | - |
| WHB2 | 15.27 | 1640, 1643 | Krishn Bihari | Baccha | Crop Production | 1640 | - | - | - |
| WHB3 | 18.77 | 1561, 1701 | Pratap Singh | Hira Lal | Crop Production | 1561 | - | - | - |
| WHB4 | 26.72 | 1560, 1565 | Ramgopal | Lallu | Crop Production | 1560 | - | - | - |
| **Jaspura (2C1B2b1b)** | | | | | | | | | |
| CD1 | 4.98 | 1631, 1653 | Babu | Ramgopal | Crop Production | 1631 | - | - | - |
| CD2 | 5.02 | 1626, 1655 | Shivram | Ballu | Crop Production | 1626 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| CD3 | 4.86 | 1589, 1592 | Kunvar Bahadur | Hira Lal | Crop Production | 1589 | - | - | - |
| CD4 | 15.4 | 1669, 1579 | Shiv Lal | Baccha | Crop Production | 1669 | - | - | - |
| CD5 | 4.92 | 1673, 1696 | Jagroop | Natthu | Crop Production | 1673 | - | - | - |
| CD6 | 7.69 | 1709 to 1718, 1573 to 1583 | Sabhajeet | Hardayal Pratap | Crop Production | 1709 | - | - | - |
| CD7 | 1.75 | 1978, 1998 | Samrjeet | Bhoora | Crop Production | 1978 | - | - | - |
| CD8 | 3.79 | 1969 to 1974 | Ramgopal | Dev Pratap | Crop Production | 1969 | - | - | - |
| CD9 | 5.3 | 1924, 1925, 1981 | Ballu | Shivram | Crop Production | 1924 | - | - | - |
| CD10 | 5.48 | 1914 to 1922, 1924 | Hira Lal | Kuldeep Singh | Crop Production | 1914 | - | - | - |
| CD11 | 5.88 | 1908 to 1912, 1923 | Bacchi | Rmabhavan | Crop Production | 1908 | - | - | - |
| CD12 | 15.8 | 1990 to 2002, 2018, 2019, 2023 | Swamideen | Prahlad | Crop Production | 1990 | - | - | - |
| CD13 | 9.38 | 2020, 2023, 2024, 2079 to 2081 | Jaswant | Sukhnandan | Crop Production | 2020 | - | - | - |
| CD14 | 15.65 | 2028 to 2042 | Gyan Babu | Samarjeet | Crop Production | 2028 | - | - | - |
| CD15 | 7.36 | 2026, 2027 | Jaswant | Sabhajeet | Crop Production | 2026 | - | - | - |
| CD16 | 7.5 | 2027, 2031 | Jaswant | Vardani | Crop Production | 2027 | - | - | - |
| CD17 | 7.34 | 2024, 2027 | Brij Kishor | Hira Lal | Crop Production | 2024 | - | - | - |
| CD18 | 5.75 | 1391, 1395 to 1397, 1400 | Shivram | Shivkaran | Crop Production | 1391 | - | - | - |
| CD19 | 6.18 | 1391 to 1393, 1398, 1399 | Avadh Bihari | Bhiya Lal | Crop Production | 1391 | - | - | - |
| CD20 | 7.45 | 1438, 1439, 1441 to 1444, 2192 | Samrjeet | Bhiyadeen | Crop Production | 1438 | - | - | - |

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| CD21 | 11.7 | 2323 to 2326 | Raghuraj | Virendra Singh | Crop Production | 2323 | - | - | - |
| CD22 | 10.35 | 2314, 2319 | Baccha | Ram Kumari | Crop Production | 2314 | - | - | - |
| CD23 | 7.65 | 2309, 2310, 2351, 2353, 2381 | Hira Lal | Vijay | Crop Production | 2309 | - | - | - |
| CD24 | 7.65 | 2311, 2347, 2348, 2351 | Ramratan Singh | Savitri | Crop Production | 2311 | - | - | - |
| CD25 | 7.65 | 2351 | Ramratan Singh | Ramnaresh | Crop Production | 2351 | - | - | - |
| CD26 | 7.51 | 2301, 2357, 2377, 2379 | Jagdish | Ramvishal | Crop Production | 2301 | - | - | - |
| CD27 | 9.3 | 2357, 2358, 2297 to 2299 | Bhoora | Chunbaad | Crop Production | 2357 | - | - | - |
| CD28 | 9.25 | 2361, 2362 | Uditnarayan | Pratap Singh | Crop Production | 2361 | - | - | - |
| CD29 | 8.5 | 2366, 2368 | Chunbad | Shiv Lal | Crop Production | 2366 | - | - | - |
| CD30 | 8.55 | 2406, 2411, 2412 to 2416 | Shivram | Krishn Bihari | Crop Production | 2406 | - | - | - |
| CD31 | 9.25 | 2401 to 2405, 2357, 2378 | Shivram | Pratap Singh | Crop Production | 2401 | - | - | - |
| CD32 | 7.65 | 2411, 2412, 2417, 2418, 2380 | Ratifal | Ramgopal | Crop Production | 2411 | - | - | - |
| CD33 | 10.34 | 2400, 2401, 2381 to 2383 | Shiv | Jamuniya | Crop Production | 2400 | - | - | - |
| CD34 | 14.26 | 2393, 2400 | Devideen | Jamuniya | Crop Production | 2393 | - | - | - |
| WHB1 | 29.72 | 1703, 1704 | Babu | Jaggu | Crop Production | 1703 | - | - | - |
| WHB2 | 26.19 | 1702, 1703, 1706, 1689, 1698, 1955 to 1957 | Shivram | Bhaiyadeen | Crop Production | 1702 | - | - | - |
| WHB3 | 13.8 | 1692, 1698 | Kunvar Bahadur | Lallu | Crop Production | 1692 | - | - | - |
| WHB4 | 32.65 | 1707, 1686, 1688, | Shiv Lal | Babu Lal | Crop | 1707 | - | - | - |

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| | | 1689 | | | Production | | | | |
| WHB5 | 25.58 | 2257 | Jagroop | Baccha | Crop Production | 2257 | - | - | - |
| WHB6 | 27.1 | 2222, 2225 | Sabhajeet | Natthu | Crop Production | 2222 | - | - | - |
| WHB7 | 38.76 | 2423 to 2430 | Samrjeet | Hardayal Pratap | Crop Production | 2423 | - | - | - |
| **Narjita (2C1B2b3a)** | | | | | | | | | |
| CD1 | 18 | 316 to 320, 321 to 320 | Laxmikant | Ram Kumari | Crop Production | 316 | - | - | - |
| CD2 | 26 | 446, 447, 439, 423, 417, 471, 470 | Bhagvandeen | Vijay | Crop Production | 446 | - | - | - |
| CD3 | 22 | 440, 445, 450, 445 | Laxmikant | Savitri | Crop Production | 440 | - | - | - |
| CD4 | 18 | 306, 308, 307, 310 | Laxmikant | Ramnaresh | Crop Production | 306 | - | - | - |
| CD5 | 20 | 22, 23 | Bhagvandeen | Ramvishal | Crop Production | 22 | - | - | - |
| CD6 | 10 | 23, 24, 322 | Pooran Singh | Chunbaad | Crop Production | 23 | - | - | - |
| CD7 | 4 | 23, 24, 322, 283, 284, 285, | Ramswaroop | Pratap Singh | Crop Production | 285, | - | - | - |
| CD8 | 4 | 274, 288, 293, 294, 273 | Natthu | Shiv | Crop Production | 274 | - | - | - |
| CD9 | 12 | 14, 15, 16, 17, 18, 19, 20 | Natthu | Devideen | Crop Production | 20 | - | - | - |
| CD10 | 4 | 70, 58 | Rahmaan Khan | Babu | Crop Production | 70 | - | - | - |
| CD11 | 4 | 70 | Rahmaan Khan | Shivram | Crop Production | 70 | - | - | - |
| CD12 | 14 | 67, 68, 70, 86 | Hanif Khan | Kunvar Bahadur | Crop Production | 86 | - | - | - |
| CD13 | 10 | 83, 86 | Jagdev | Shiv Lal | Crop | 83 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | Production | | | | |
| CD14 | 15 | 70, 83 | Rahmaan Khan | Jagroop | Crop Production | 70 | - | - | - |
| CD15 | 5 | 83 | Sahamat Khan | Sabhajeet | Crop Production | 83 | - | - | - |
| CD16 | 5 | 83 | Sahamat Khan | Samrjeet | Crop Production | 83 | - | - | - |
| CD17 | 10 | 83 | Sahamat Khan | Ramgopal | Crop Production | 83 | - | - | - |
| CD18 | 10 | 83, 103 | Rustam Singh | Ballu | Crop Production | 83 | - | - | - |
| CD19 | 15 | 103 | Rajaram | Hira Lal | Crop Production | 103 | - | - | - |
| CD20 | 15 | 109 | Jagdev | Bacchi | Crop Production | 109 | - | - | - |
| CD21 | 15 | 109 | Pooran Singh | Swamideen | Crop Production | 109 | - | - | - |
| CD22 | 15 | 109, 722 | Shivkaran | Jaswant | Crop Production | 109 | - | - | - |
| CD23 | 4 | 118 | Bhiya Lal | Gyan Babu | Crop Production | 118 | - | - | - |
| CD24 | 4 | 150, 160 | Bhiyadeen | Jaswant | Crop Production | 150 | - | - | - |
| CD25 | 4 | 118 | Virendra Singh | Jaswant | Crop Production | 118 | - | - | - |
| CD26 | 8 | 9, 10, 12, 2, 3, 4 | Ram Kumari | Brij Kishor | Crop Production | 4 | - | - | - |
| CD27 | 8 | 13, 16, 17, 18 | Vijay | Shivram | Crop Production | 13 | - | - | - |
| CD28 | 5 | 14, 237, 238, 239 | Savitri | Avadh Bihari | Crop Production | 14 | - | - | - |
| CD29 | 5 | 237, 234, 235, 233, 232 | Ramnaresh | Samrjeet | Crop Production | 237 | - | - | - |
| CD30 | | 727 to 732 | Ramvishal | Raghuraj | Crop Production | 727 | - | - | - |
| CD31 | | 1054, 1055, 1053 | Chunbaad | Baccha | Crop | 1054 | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | Production | | | | |
| CD32 | | 1069 to 1082 | Pratap Singh | Hira Lal | Crop Production | 1069 | - | - | - |
| CD33 | | 728, 762 | Shivkaran | Prahlad | Crop Production | 728 | - | - | - |
| CD34 | | 1091 to 1096 | Bhiya Lal | Sukhnandan | Crop Production | 1091 | - | - | - |
| CD35 | | 722, 723 to 54, 1056 | Bhiyadeen | Samarjeet | Crop Production | 722 | - | - | - |
| WHB1 | 22 | 1053, 729, 762, 1089 to 1042 | Virendra Singh | Sabhajeet | Crop Production | 1053 | - | - | - |
| **Bahundri (2C1B2n1c)** | | | | | | | | | |
| CD1 | 8 | 186 to 188 | Bhagirath | Bhaiyadeen | Crop Production | 186 | - | - | - |
| CD2 | 8 | 183, 283 | Anil Kumar | Lallu | Crop Production | 183 | - | - | - |
| CD3 | 8 | 181, 285 | Bhagirath | Babu Lal | Crop Production | 181 | - | - | - |
| CD4 | 8 | 289 | Bhagirath | Baccha | Crop Production | 289 | - | - | - |
| CD5 | 9 | 167 | Bhagirath | Natthu | Crop Production | 167 | - | - | - |
| CD6 | 8 | 350, 351, 353, 370 | Pooran | Hardayal Pratap | Crop Production | 350 | - | - | - |
| CD7 | 8 | 354, 355, 356, 357, 358, 360 | Gaffar Khan | Bhoora | Crop Production | 354 | - | - | - |
| CD8 | 8 | | Rajendra Kumar | Dev Pratap | Crop Production | | - | - | - |
| CD9 | 10 | 155, 362, 156, 363 | Gangau | Shivram | Crop Production | 155 | - | - | - |
| CD10 | 10 | 364, 366, 368 | Gangau | Kuldeep Singh | Crop Production | 364 | - | - | - |
| CD11 | 8 | 422, 423, 424, 419, 420, 421 | Raghuveer | Rmabhavan | Crop Production | 422 | - | - | - |
| CD12 | 10 | 386, 38, 406, 404, 384, 383 | Raghvendra | Prahlad | Crop Production | 386 | - | - | - |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD13 | 8 | 402, 408/1, 404 | Madan | Sukhnandan | Crop Production | 402 | - | - | - |
| CD14 | 6 | 333, 670 | | Samarjeet | Crop Production | 333 | - | - | - |
| CD15 | 10 | 333, 394, 651, 397, 398 | Radhe | Sabhajeet | Crop Production | 333 | - | - | - |
| CD16 | 6 | 148, 445, 443, 444 | Rajaram | Vardani | Crop Production | 148 | - | - | - |
| CD17 | 8 | 461, 462, 463, 470 | Suraj | Hira Lal | Crop Production | 461 | - | - | - |
| CD18 | 7 | 450, 451, 488 to 490 | Bhanu | Shivkaran | Crop Production | 450 | - | - | - |
| CD19 | 7 | 423, 438, 439, 492 | Mahesh | Bhiya Lal | Crop Production | 423 | - | - | - |
| CD20 | 6 | 488, 495, 491, 485, 493 | Rajaram | Bhiyadeen | Crop Production | 493 | - | - | - |
| CD21 | 8 | 410, 414, 426 to 431 | Ramgopal | Virendra Singh | Crop Production | 431 | - | - | - |
| CD22 | 8 | 457, 469, 461 | Dayashankar | Ram Kumari | Crop Production | 457 | - | - | - |
| CD23 | 10 | 200, 201, 202, 203 | Avdesh | Vijay | Crop Production | 200 | - | - | - |
| CD24 | 10 | 210, 199, 216, 205 | Bhoora | Savitri | Crop Production | 210 | - | - | - |
| CD25 | 10 | 382, 404, 342, 389 | Rajendra | Ramnaresh | Crop Production | 382 | - | - | - |
| CD26 | 112 | 2003 to 2005, 2017, 2018 | Prahlad | Gaffar Khan | Crop Production | 2003 | - | - | - |
| CD27 | 9 | 2007, 2008, 2009, 2011, 2013, 2014 | Ramsnehi | Rajendra Kumar | Crop Production | 2007 | - | - | - |
| CD28 | 8 | 1886, 1822, 1823 | Raguveer | Gangau | Crop Production | 1886 | - | - | - |
| CD29 | 9 | 1882, 1883, 1885, 1880, 1886 | Ramsnehi | Gangau | Crop Production | 1882 | - | - | - |
| CD30 | 12 | 1855, 1833, 1852, 1854, 1863 | Rajpal | Raghuveer | Crop Production | 1855 | - | - | - |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD31 | 9 | 9 | Mahendra | Raghvendra | Crop Production | 9 | - | - | - |
| CD32 | 12 | 12 | Ramdayal | Madan | Crop Production | 12 | - | - | - |
| CD33 | 10 | 10 | Badri | | Crop Production | 10 | - | - | - |
| CD34 | 10 | 10 | Gopal | Radhe | Crop Production | 10 | - | - | - |
| CD35 | 10 | 10 | | Rajaram | Crop Production | 10 | - | - | - |
| CD36 | 10 | 573, 574, 568, 570, 544 | Bhoora | Suraj | Crop Production | 573 | - | - | - |
| CD37 | 10 | 594, 1856, 595, 596, 598 | Ramdayal | Bhanu | Crop Production | 594 | - | - | - |
| WHB1 | 15 | 561, 564, 565, 494, 302 | Suraj Karan | Mahesh | Crop Production | 561 | - | - | - |
| WHB2 | 15 | 584, 591, 585, 593 | Gopal | Rajaram | Crop Production | 584 | - | - | - |
| WHB3 | 20 | 2033, 2035, 2063, 2031, 1825 | Pradeep | Rakesh Kumar | Crop Production | 2033 | - | - | - |

**4.3 Convergence in IWMP-X, Banda**

There is no planning of convergence.

# CHAPTER – 5

## MANAGEMENT/ACTION PLAN

The details of Preparatory Phase, Works Phase and Convergence planning are described in subsequent section

### 5.1 Entry Point Activities (EPA)

Entry point activities were executed with the consent of stake holders and it helped in winning the confidence of the villagers for moving ahead the other programmes of watershed. In total 11 EPA activities were executed in the project area which costed Rs. 17.89 lakh.

| Name of PIA | Name of Project | Year | Name of Block | Name of project/ Name of village | Code of project | E.P.A cost in lakh | Name of Work | Cost in lakh | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| **Soil Conservation Division-Banda-I** | **IWMP-XI** | **2011-12** | **Visanda** | Narjita | 2ClB2b3a | 2.29 | Puliya Cons. Naali, Kharanja Road Repairment | 2.29 | |
| | | | | Gauri Kalan | 2ClB2b2a | 1.56 | | 1.56 | |
| | | | | Gadariya | 2C1B2c1d | 0.70 | | 0.70 | |
| | | | | Birkhera | 2C1B2c1c | 0.60 | | 0.60 | |
| | | | | Jaspura | 2C1B2b1b | 2.67 | | 2.67 | |
| | | | | Terha | 2C1B2c1e | 3.05 | | 3.05 | |
| | | | | Bhatha | 2C1B2a3h | 2.31 | | 2.31 | |
| | | | | Dhundh Pur | 2C1B2c2b | 0.00 | | 0.00 | |
| | | | | Madauli Khurd | 2C1B2n1b | 2.29 | | 2.29 | |
| | | | | Kiswahi | 2C1B2n1e | 2.40 | | 2.40 | |
| | **Total** | | | | | **17.89** | | **17.89** | |

**5.2 Works Phase**

**Following are the major problems of the watersheds**

- Water scarcity both for drinking as well as irrigation
- Excess runoff and soil loss
- Low water holding capacity of the soil
- Low productivity of crops
- Low fertility of soil
- Low cropping intensity
- Lack of technical knowledge
- *Anna Pratha* (let loose system of cattle)
- Poor vegetative cover
- Poor/low productive breeds of miltch animals
- Lack of feed & fodder availability
- Non availability of wood/fuel wood
- Lack of proper market facilities
- Low income of the households
- Lack of employment opportunity

**Estimation of Runoff from the Watershed**

Runoff from the watershed is estimated by Curve Number method of the Soil Conservation Service of the USDA using 15 years data (1996-2010). It is estimated that runoff potential of the project area is 300 mm, equivalent to 30-45 per cent of average annual rainfall. Expected runoff and soil loss from the project area are depicted Table 5.1.

**Table 5.1: Runoff and soil erosion in the project area (IWMP-XI, Banda)**

| Sr. No. | Name of Micro Watershed | Cause | Type of erosion | Area affected (ha) | Run off (mm/ year) | Average Soil Loss (Tonnes/ ha/ year) |
|---|---|---|---|---|---|---|
| 1 | Narjita (2ClB2b3a) | Water erosion | | | | |
| | | a | Sheet | 342.23 | 300 | 7-10 |
| | | b | Rill | 239.56 | | |
| | | c | Gully | 102.67 | | |
| | | Total | | **684.45** | | |
| 2 | Gauri Kalan | Water erosion | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (2ClB2b2a) | a | Sheet | 233.74 | 300 | 7-10 |
| | | b | Rill | 163.62 | | |
| | | c | Gully | 70.12 | | |
| | | Total | | **467.48** | | |
| 3 | Gadariya (2C1B2c1d) | Water erosion | | | | |
| | | a | Sheet | 99.76 | 300 | 7-10 |
| | | b | Rill | 69.83 | | |
| | | c | Gully | 29.93 | | |
| | | Total | | **199.51** | | |
| 4 | Birkhera (2C1B2c1c) | Water erosion | | | | |
| | | a | Sheet | 455.85 | 300 | 7-10 |
| | | b | Rill | 319.09 | | |
| | | c | Gully | 136.75 | | |
| | | Total | | **911.69** | | |
| 5 | Jaspura (2C1B2b1b) | Water erosion | | | | |
| | | a | Sheet | 397.82 | 300 | 7-10 |
| | | b | Rill | 278.47 | | |
| | | c | Gully | 119.35 | | |
| | | Total | | **795.64** | | |
| 6 | Terha (2C1B2c1e) | Water erosion | | | | |
| | | a | Sheet | 92.10 | 300 | 7-10 |
| | | b | Rill | 64.47 | | |
| | | c | Gully | 27.63 | | |
| | | Total | | **184.20** | | |
| 7 | Bhatha (2C1B2a3h) | Water erosion | | | | |
| | | a | Sheet | 344.99 | 300 | 7-10 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | b | Rill | 241.49 | | |
| | | c | Gully | 103.50 | | |
| | | Total | | **689.98** | | |
| 8 | Dhundh Pur (2C1B2c2b) | Water erosion | | | | |
| | | a | Sheet | 711.00 | 300 | 7-10 |
| | | b | Rill | 497.70 | | |
| | | c | Gully | 213.30 | | |
| | | Total | | **1422.00** | | |
| 9 | Madauli Khurd (2C1B2n1b) | Water erosion | | | | |
| | | a | Sheet | 342.28 | 300 | 7-10 |
| | | b | Rill | 239.59 | | |
| | | c | Gully | 102.68 | | |
| | | Total | | **684.55** | | |
| 10 | Kiswahi (2C1B2n1e) | Water erosion | | | | |
| | | a | Sheet | 374.50 | 300 | 7-10 |
| | | b | Rill | 262.15 | | |
| | | c | Gully | 112.35 | | |
| | | Total | | **749.00** | | |
| | **IWMP-XI** | | | **6788.50** | | |

**Watershed Development Activities Proposed**

The details of the activities of watershed works (natural resource conservation) are marked on individual field in the micro-watershed wise proposed plan (Map Section). Individual beneficiary wise estimate has been prepared for each micro-watershed and gram panchayat. Information of individual beneficiaries is kept in respective project file available with PIA. (Table 5.2 and 5.3). Similar exercise was also done for participatory crop trials. Location of these trials is marked on proposed plan of participatory crop demonstration (available in map section).

**Table 5.2: Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XI, Banda**

| Sr. No. | Particular of Measures/Activities | Unit | Narjita (2ClB2b3a) | | Gauri Kalan (2ClB2b2a) | | Gadariya (2C1B2c1d) | | Birkhera (2C1B2c1c) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No., Length / ha, Volume | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| I | **Soil & Water Conservation Measures** | | | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 4500 | 1.76 | | | 3402 | 2.66 | 3024 | 1.18 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 4700 | 4.01 | 7445 | 4.38 | 3888 | 1.60 | 2592 | 1.07 |
| | **B- <u>Water Resource Development</u>** | | | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 4904.8 | 25.63 | 17050 | 13.14 | 5737 | 5.48 | 29458 | 3.65 |
| | 1a- Water storing capacity | cum. | 13300 | - | 4800 | - | 1600 | - | 1080 | - |
| | 1b. Area proposed for irrigation | ha | 22 | - | 8 | - | 3 | - | 2 | - |
| | 2. Water Harvesting Bund with surplushing structure | No. | 1430 | 0.72 | 6225.6 | 4.38 | - | - | 4 | 2.57 |
| | 2a-Water storing capacity | cum. | 600 | - | 1100 | - | - | - | 700 | - |
| | 2b. Area proposed for irrigation by WHB | ha | 1.00 | - | 1.83 | - | - | - | 1.17 | - |
| | **Sub Total** | | | **32.12** | | **21.91** | | **9.74** | | **8.47** |
| II | **<u>Livelihood for landless People</u>** | | | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 3/30 | 0.75 | 2/20 | 0.50 | 1/10 | 0.25 | 1/10 | 0.25 |
| | 2. Back Yard Poultry | -do- | 3/30 | 0.75 | 2/20 | 0.50 | 1/10 | 0.25 | 1/10 | 0.25 |
| | 3. Poultry (Broiler) | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 1/10 | 0.25 | 1/10 | 0.25 |
| | 4. Black Smithy | -do- | 2/20 | 0.50 | 1/10 | 0.25 | 0 | 0.00 | 0 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5. Rope Making (Linseed) | -do- | 2/20 | 0.50 | 1/10 | 0.25 | 0 | 0.00 | 0 | 0.00 |
| | 6. Tailoring | -do- | 2/20 | 0.50 | 1/10 | 0.25 | 0 | 0.00 | 0 | 0.00 |
| | 7. Vermi composting | -do- | 2/20 | 0.50 | 1/10 | 0.25 | 1/10 | 0.25 | 0 | 0.00 |
| | 8. Fruit Processing | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 1/10 | 0.25 | 1/10 | 0.25 |
| | 9. Seed Bank | -do- | 3/30 | 0.66 | 2/20 | 0.52 | 1/10 | 0.32 | 1/10 | 0.36 |
| | **Sub Total** | | 21/210 | 5.16 | 14/140 | 3.52 | 6/60 | 1.57 | 5/50 | 1.36 |
| III | **Agriculture Production System** | | | | | | | | | |
| | **(1)SMC Area** | | | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 7/2.8 | 0.33 | 5/2.0 | 0.24 | 2/0.8 | 0.09 | 2/0.8 | 0.09 |
| | 2. Chickpea | -do- | 7/2.8 | 0.38 | 5/2 | 0.27 | 2/0.8 | 0.11 | 2/0.8 | 0.11 |
| | 3. Field Pea | -do- | 7/2.8 | 0.40 | 5/2 | 0.29 | 2/0.8 | 0.11 | 2/0.8 | 0.11 |
| | 4. Til | -do- | 7/2.8 | 0.12 | 5/2 | 0.08 | 2/0.8 | 0.03 | 2/0.8 | 0.03 |
| | 5. Urd | -do- | 7/2.8 | 0.25 | 5/2 | 0.18 | 2/0.8 | 0.07 | 2/0.8 | 0.07 |
| | 6. Moong | -do- | 7/2.8 | 0.26 | 5/2 | 0.18 | 2/0.8 | 0.07 | 2/0.8 | 0.07 |
| | 7. Arhar | -do- | 7/2.8 | 0.21 | 5/2 | 0.15 | 2/0.8 | 0.06 | 2/0.8 | 0.06 |
| | 8. Wheat | -do- | 7/2.8 | 0.40 | 5/2 | 0.29 | 2/0.8 | 0.12 | 2/0.8 | 0.12 |
| | **(2) Water Resource Area:** | | | | | | | | | |
| | **B- Production of seeds** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 7/2.8 | 0.33 | 5/2 | 0.24 | 2/0.8 | 0.09 | 2/0.8 | 0.09 |
| | 2. Chickpea | -do- | 7/2.8 | 0.38 | 5/2 | 0.27 | 2/0.8 | 0.11 | 2/0.8 | 0.11 |
| | 3. Field Pea | -do- | 7/2.8 | 0.40 | 5/2 | 0.29 | 2/0.8 | 0.11 | 2/0.8 | 0.11 |
| | 4. Til | -do- | 7/2.8 | 0.12 | 5/2 | 0.08 | 2/0.8 | 0.03 | 2/0.8 | 0.03 |
| | 5. Urd | -do- | 7/2.8 | 0.25 | 5/2 | 0.18 | 2/0.8 | 0.07 | 2/0.8 | 0.07 |
| | 6. Moong | -do- | 7/2.8 | 0.26 | 5/2 | 0.18 | 2/0.8 | 0.07 | 1/0.4 | 0.04 |
| | 7. Arhar | -do- | 7/2.8 | 0.21 | 5/2 | 0.15 | 2/0.8 | 0.06 | 1/0.4 | 0.03 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 8. Wheat | -do- | 7/2.8 | 0.40 | 5/2 | 0.29 | 1/0.4 | 0.06 | 1/0.4 | 0.06 |
| | **Agro forestry:-** | | | | | | | | | |
| | 1- Aonla | Area in ha | 2 | 0.36 | 1 | 0.18 | 1 | 0.18 | 1 | 0.18 |
| | 2. Guava | Area in ha | 1 | 0.18 | 1 | 0.18 | 1 | 0.18 | 0 | 0.00 |
| | **Live Stock Management** | | | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 37 | 0.22 | 28 | 0.17 | 14 | 0.08 | 16 | 0.10 |
| | B. Vaccination/Medication | No. of Animals | 38 | 0.02 | 28 | 0.02 | 10 | 0.01 | 16 | 0.01 |
| | C. Artificial Insemination | No. of Animals | 38 | 0.02 | 28 | 0.01 | 15 | 0.01 | 16 | 0.01 |
| | D. Natural Service. | He Buffalo | 1 | 0.24 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | **Total for Ag. Production System** | | | **5.74** | | **3.91** | | **1.74** | | **1.51** |
| **Total** | | | | **37.28** | | **25.43** | | **11.31** | | **9.83** |

**Cont.**

| **Sr. No.** | **Particular of Measures/Activities** | **Unit** | **Jaspura (2C1B2b1b)** | | **Terha (2C1B2c1e)** | | **Bhatha (2C1B2a3h)** | | **Dhundh Pur (2C1B2c2b)** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **No., Length / ha, Volume** | **Qanty.** | **Cost (Rs. In lakh)** | **Qanty.** | **Cost (Rs. In lakh)** | **Qanty.** | **Cost (Rs. In lakh)** | **Qanty.** | **Cost (Rs. In lakh)** |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| I | **Soil & Water Conservation Measures** | | | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 4579 | 1.79 | 16704 | 7.74 | 0 | 0.00 | 0.00 | 0.00 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 8066 | 3.33 | 14382 | 7.23 | 18470 | 10.62 | 0.00 | 0.00 |
| | **B- Water Resource Development** | | | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 23638.4 | 18.67 | 29458 | 19.91 | 12690 | 16.58 | - | - |
| | 1a- Water storing capacity | cum. | 11560 | - | 8400 | - | 4730 | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1b. Area proposed for irrigation | ha | 19 | - | 14 | - | 8 | - | - | - |
| | 2. Water Harvesting Bund with surplushing structure | No. | 15347.6 | 13.57 | 4 | 7.86 | 6400 | 5.19 | - | - |
| | 2a-Water storing capacity | cum. | 3500 | - | 1680 | - | 1000 | - | - | - |
| | 2b. Area proposed for irrigation by WHB | ha | 5.83 | - | 2.80 | - | 7.20 | - | - | - |
| | **Sub Total** | | | **37.36** | | **42.74** | | **32.39** | | **0.00** |
| II | **Livelihood for landless People** | | | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 3/30 | 0.75 | 3/30 | 0.75 | 3/30 | 0.75 | - | - |
| | 2. Back Yard Poultry | -do- | 3/30 | 0.75 | 3/30 | 0.75 | 3/30 | 0.75 | - | - |
| | 3. Poultry (Broiler) | -do- | 3/30 | 0.75 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 4. Black Smithy | -do- | 2/20 | 0.50 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 5. Rope Making (Linseed) | -do- | 2/20 | 0.50 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 6. Tailoring | -do- | 2/20 | 0.50 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 7. Vermi composting | -do- | 3/30 | 0.75 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 8. Fruit Processing | -do- | 3/30 | 0.75 | 3/30 | 0.75 | 2/20 | 0.50 | - | - |
| | 9. Seed Bank | -do- | 3/30 | 0.75 | 3/30 | 0.87 | 3/30 | 0.71 | - | - |
| | **Sub Total** | | 24/240 | 6.00 | 27/270 | 6.87 | 21/210 | 5.21 | - | - |
| III | **Agriculture Production System** | | | | | | | | | |
| | **(1)SMC Area** | | | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 9/3.6 | 0.43 | 9/3.6 | 0.43 | 7/2.8 | 0.33 | - | - |
| | 2. Chickpea | -do- | 9/3.6 | 0.49 | 9/3.6 | 0.49 | 7/2.8 | 0.38 | - | - |
| | 3. Field Pea | -do- | 8/3.2 | 0.46 | 9/3.6 | 0.52 | 7/2.8 | 0.40 | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 4. Til | -do- | 8/3.2 | 0.14 | 9/3.6 | 0.15 | 7/2.8 | 0.12 | - | - |
| | 5. Urd | -do- | 8/3.2 | 0.28 | 9/3.6 | 0.32 | 7/2.8 | 0.25 | - | - |
| | 6. Moong | -do- | 8/3.2 | 0.29 | 9/3.6 | 0.33 | 7/2.8 | 0.26 | - | - |
| | 7. Arhar | -do- | 8/3.2 | 0.24 | 9/3.6 | 0.27 | 7/2.8 | 0.21 | - | - |
| | 8. Wheat | -do- | 8/3.2 | 0.46 | 9/3.6 | 0.52 | 7/2.8 | 0.40 | - | - |
| | **(2) Water Resource Area:** | | | | | | | | | |
| | **B- Production of seeds** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 8/3.2 | 0.38 | 9/3.6 | 0.43 | 7/2.8 | 0.33 | - | - |
| | 2. Chickpea | -do- | 8/3.2 | 0.44 | 9/3.6 | 0.49 | 7/2.8 | 0.38 | - | - |
| | 3. Field Pea | -do- | 8/3.2 | 0.46 | 9/3.6 | 0.52 | 7/2.8 | 0.40 | - | - |
| | 4. Til | -do- | 8/3.2 | 0.14 | 9/3.6 | 0.15 | 7/2.8 | 0.12 | - | - |
| | 5. Urd | -do- | 8/3.2 | 0.28 | 9/3.6 | 0.32 | 7/2.8 | 0.25 | - | - |
| | 6. Moong | -do- | 8/3.2 | 0.29 | 9/3.6 | 0.33 | 7/2.8 | 0.26 | - | - |
| | 7. Arhar | -do- | 8/3.2 | 0.24 | 9/3.6 | 0.27 | 7/2.8 | 0.21 | - | - |
| | 8. Wheat | -do- | 8/3.2 | 0.46 | 8/3.2 | 0.46 | 7/2.8 | 0.40 | - | - |
| | **Agro forestry:-** | | | | | | | | | |
| | 1- Aonla | Area in ha | 2 | 0.36 | 3 | 0.54 | 2 | 0.36 | - | - |
| | 2. Guava | Area in ha | 2 | 0.36 | 2 | 0.36 | 1 | 0.18 | - | - |
| | **Live Stock Management** | | | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 35 | 0.21 | 39 | 0.23 | 44 | 0.26 | - | - |
| | B. Vaccination/Medication | No. of Animals | 35 | 0.02 | 39 | 0.02 | 44 | 0.03 | - | - |
| | C. Artificial Insemination | No. of Animals | 35 | 0.01 | 39 | 0.02 | 44 | 0.02 | - | - |
| | D. Natural Service. | He Buffalo | 1 | 0.24 | 2 | 0.48 | 1 | 0.24 | - | - |
| | **Total for Ag. Production System** | | | **6.67** | | **7.63** | | **5.78** | | - |
| **Total** | | | | **43.37** | | **49.61** | | **37.60** | | - |

**Cont.**

| Sr. No. | Particular of Measures/Activities | Unit | Madauli Khurd (2C1B2n1b) | | Kiswahi (2C1B2n1e) | | IWMP-XI | |
|---|---|---|---|---|---|---|---|---|
| | | No., Length / ha, Volume | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| I | **Soil & Water Conservation Measures** | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 14580 | 7.01 | 0 | 0.00 | 46789 | 22.15 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 288 | 0.12 | 15350 | 10.37 | 75180 | 42.72 |
| | **B- <u>Water Resource Development</u>** | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 22780 | 19.63 | 27312 | 20.86 | 173028 | 143.56 |
| | 1a- Water storing capacity | cum. | 12400 | - | 11100 | - | 68970 | |
| | 1b. Area proposed for irrigation | ha | 21 | - | 19 | - | 115 | |
| | 2. Water Harvesting Bund with surplushing structure | No. | 4490.3 | 5.37 | 3877 | 2.37 | 37779 | 42.03 |
| | 2a-Water storing capacity | cum. | 2000 | | 1200 | | 11780 | |
| | 2b. Area proposed for irrigation by WHB | ha | 3.33 | | 2.00 | | 20 | |
| | **Sub Total** | | | **32.12** | | **33.60** | | **250.46** |
| II | **<u>Livelihood for landless People</u>** | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 3/30 | 0.75 | 3/30 | 0.75 | 22/220 | 5.50 |
| | 2. Back Yard Poultry | -do- | 3/30 | 0.75 | 3/30 | 0.75 | 22/220 | 5.50 |
| | 3. Poultry (Broiler) | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 18/180 | 4.50 |
| | 4. Black Smithy | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 14/140 | 3.50 |
| | 5. Rope Making (Linseed) | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 14/140 | 3.50 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 6. Tailoring | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 14/140 | 3.50 |
| | 7. Vermi composting | -do- | 2/20 | 0.50 | 2/20 | 0.50 | 16/180 | 4.00 |
| | 8. Fruit Processing | -do- | 2/20 | 0.50 | 3/30 | 0.75 | 19/190 | 4.75 |
| | 9. Seed Bank | -do- | 3/30 | 0.66 | 3/30 | 0.65 | 22/220 | 5.50 |
| | **Sub Total** | | **21/210** | **5.16** | **22/220** | **5.40** | **161/1610** | **40.25** |
| III | **Agriculture Production System** | | | | | | | |
| | **(1)SMC Area** | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 7/2.8 | 0.33 | 8/3.2 | 0.38 | 56/22.4 | 2.66 |
| | 2. Chickpea | -do- | 7/2.8 | 0.38 | 7/2.8 | 0.38 | 55/22.0 | 2.99 |
| | 3. Field Pea | -do- | 7/2.8 | 0.40 | 7/2.8 | 0.40 | 54/21.6 | 3.10 |
| | 4. Til | -do- | 7/2.8 | 0.12 | 7/2.8 | 0.12 | 54/21.6 | 0.91 |
| | 5. Urd | -do- | 7/2.8 | 0.25 | 7/2.8 | 0.25 | 54/21.6 | 1.91 |
| | 6. Moong | -do- | 7/2.8 | 0.26 | 7/2.8 | 0.26 | 54/21.6 | 1.97 |
| | 7. Arhar | -do- | 7/2.8 | 0.21 | 7/2.8 | 0.21 | 54/21.6 | 1.59 |
| | 8. Wheat | -do- | 7/2.8 | 0.40 | 7/2.8 | 0.40 | 54/21.6 | 3.12 |
| | **(2) Water Resource Area:** | | | | | | | |
| | **B- Production of seeds** | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 7/2.8 | 0.33 | 7/2.8 | 0.33 | 54/21.6 | 2.56 |
| | 2. Chickpea | -do- | 7/2.8 | 0.38 | 7/2.8 | 0.38 | 54/21.6 | 2.94 |
| | 3. Field Pea | -do- | 7/2.8 | 0.40 | 7/2.8 | 0.40 | 54/21.6 | 3.10 |
| | 4. Til | -do- | 7/2.8 | 0.12 | 7/2.8 | 0.12 | 54/21.6 | 0.91 |
| | 5. Urd | -do- | 7/2.8 | 0.25 | 7/2.8 | 0.25 | 54/21.6 | 1.91 |
| | 6. Moong | -do- | 7/2.8 | 0.26 | 7/2.8 | 0.26 | 53/21.2 | 1.93 |
| | 7. Arhar | -do- | 7/2.8 | 0.21 | 7/2.8 | 0.21 | 53/21.2 | 1.56 |
| | 8. Wheat | -do- | 7/2.8 | 0.40 | 7/2.8 | 0.40 | 51/20.4 | 2.95 |
| | **Agro forestry:-** | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1- Aonla | Area in ha | 2 | 0.36 | 2 | 0.36 | 16 | 2.88 |
| | 2. Guava | Area in ha | 1 | 0.18 | 2 | 0.36 | 11 | 1.98 |
| | **Live Stock Management** | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 37 | 0.22 | 42 | 0.25 | 292 | 1.75 |
| | B. Vaccination/Medication | No. of Animals | 38 | 0.02 | 42 | 0.03 | 290 | 0.18 |
| | C. Artificial Insemination | No. of Animals | 38 | 0.02 | 42 | 0.02 | 295 | 0.12 |
| | D. Natural Service. | He Buffalo | 1 | 0.24 | 1 | 0.24 | 7 | 1.68 |
| | **Total for Ag. Production System** | | | **5.74** | | **6.00** | | **44.72** |
| **Total** | | | | **37.28** | | **39.00** | | **335.43** |

**tails of Watershed Development Activities proposed in IWMP-XI, Banda**

| Sr. No. | Particular of Measures/Activities | Unit | Gadariya | | Sikahula | | Narjita | | Gaurikala | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No., Length / ha, Volume | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| I | **Soil & Water Conservation Measures** | | | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 11387 | 5.39 | 603 | 0.29 | 5725 | 2.71 | 8625 | 4.08 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 18296 | 10.40 | 968 | 0.55 | 9198 | 5.23 | 13858 | 7.87 |
| | **B- Water Resource Development** | | | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 42108 | 34.94 | 2228 | 1.85 | 21170 | 17.56 | 31894 | 26.46 |
| | 1a- Water storing capacity | cum. | 16784 | 0.00 | 888 | 0.00 | 8439 | 0.00 | 12713 | 0.00 |
| | 1b. Area proposed for irrigation | ha | 28 | 0.00 | 1 | 0.00 | 14 | 0.00 | 21 | 0.00 |
| | 2. Water Harvesting Bund with surplushing structure | No. | 9194 | 10.23 | 487 | 0.54 | 4622 | 5.14 | 6964 | 7.75 |
| | 2a-Water storing capacity | cum. | 2867 | 0.00 | 152 | 0.00 | 1441 | 0.00 | 2171 | 0.00 |
| | 2b. Area proposed for irrigation by | ha | 5 | 0.00 | 0 | 0.00 | 2 | 0.00 | 3.62 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WHB | | | | | | | | | |
| | **Sub Total** | | | **60.95** | | **3.23** | | **30.64** | | **46.17** |
| II | **Livelihood for landless People** | | | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 5/50 | 1.25 | 0 | 0.00 | 3/30 | 0.75 | 4/40 | 1.00 |
| | 2. Back Yard Poultry | -do- | 5/50 | 1.25 | 0 | 0.00 | 3/30 | 0.75 | 4/40 | 1.00 |
| | 3. Poultry (Broiler) | -do- | 5/50 | 1.25 | 0 | 0.00 | 2/20 | 0.50 | 4/40 | 1.00 |
| | 4. Black Smithy | -do- | 4/40 | 1.00 | 0 | 0.00 | 2/20 | 0.50 | 3/30 | 0.75 |
| | 5. Rope Making (Linseed) | -do- | 4/40 | 1.00 | 0 | 0.00 | 2/20 | 0.50 | 2/20 | 0.50 |
| | 6. Tailoring | -do- | 4/40 | 1.00 | 0 | 0.00 | 2/20 | 0.50 | 1/10 | 0.25 |
| | 7. Vermi composting | -do- | 4/40 | 1.00 | 0 | 0.00 | 2/20 | 0.50 | 2/20 | 0.50 |
| | 8. Fruit Processing | -do- | 4/40 | 1.00 | 0 | 0.00 | 2/20 | 0.50 | 5/50 | 1.25 |
| | 9. Seed Bank | -do- | 4/40 | 1.05 | 2/20 | 0.52 | 2/20 | 0.42 | 5/50 | 1.17 |
| | **Sub Total** | | 39/390 | 9.80 | 2/20 | 0.52 | 20/200 | 4.92 | 30/300 | 7.42 |
| III | **Agriculture Production System** | | | | | | | | | |
| | **(1)SMC Area** | | | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 15/6.0 | 0.71 | 1/0.4 | 0.05 | 7/2.8 | 0.33 | 9/3.6 | 0.43 |
| | 2. Chickpea | -do- | 14/5.6 | 0.76 | 1/0.4 | 0.05 | 7/2.8 | 0.38 | 9/3.6 | 0.49 |
| | 3. Field Pea | -do- | 13/5.2 | 0.75 | 1/0.4 | 0.06 | 7/2.8 | 0.40 | 9/3.6 | 0.52 |
| | 4. Til | -do- | 13/5.2 | 0.22 | 1/0.4 | 0.02 | 7/2.8 | 0.12 | 9/3.6 | 0.15 |
| | 5. Urd | -do- | 13/5.2 | 0.46 | 1/0.4 | 0.04 | 7/2.8 | 0.25 | 9/3.6 | 0.32 |
| | 6. Moong | -do- | 13/5.2 | 0.47 | 1/0.4 | 0.04 | 7/2.8 | 0.26 | 9/3.6 | 0.33 |
| | 7. Arhar | -do- | 13/5.2 | 0.38 | 1/0.4 | 0.03 | 7/2.8 | 0.21 | 9/3.6 | 0.27 |
| | 8. Wheat | -do- | 13/5.2 | 0.75 | 1/0.4 | 0.06 | 7/2.8 | 0.40 | 9/3.6 | 0.52 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **(2) Water Resource Area:** | | | | | | | | | |
| | **B- Production of seeds** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 13/5.2 | 0.62 | 1/0.4 | 0.05 | 7/2.8 | 0.33 | 9/3.6 | 0.43 |
| | 2. Chickpea | -do- | 13/5.2 | 0.71 | 1/0.4 | 0.05 | 7/2.8 | 0.38 | 9/3.6 | 0.49 |
| | 3. Field Pea | -do- | 13/5.2 | 0.75 | 1/0.4 | 0.06 | 7/2.8 | 0.40 | 9/3.6 | 0.52 |
| | 4. Til | -do- | 13/5.2 | 0.22 | 1/0.4 | 0.02 | 7/2.8 | 0.12 | 9/3.6 | 0.15 |
| | 5. Urd | -do- | 12/4.8 | 0.43 | 1/0.4 | 0.04 | 7/2.8 | 0.25 | 9/3.6 | 0.32 |
| | 6. Moong | -do- | 12/4.8 | 0.44 | 0 | 0.00 | 7/2.8 | 0.26 | 9/3.6 | 0.33 |
| | 7. Arhar | -do- | 14/5.6 | 0.41 | 0 | 0.00 | 7/2.8 | 0.21 | 9/3.6 | 0.27 |
| | 8. Wheat | -do- | 12/4.8 | 0.69 | 0 | 0.00 | 7/2.8 | 0.40 | 9/3.6 | 0.52 |
| | **Agro forestry:-** | | | | | | | | | |
| | 1- Aonla | Area in ha | 6 | 1.08 | 0 | 0.00 | 2 | 0.36 | 3 | 0.54 |
| | 2. Guava | Area in ha | 2 | 0.36 | 0 | 0.00 | 1 | 0.18 | 3 | 0.54 |
| | **Live Stock Management** | | | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 66 | 0.40 | 2 | 0.01 | 34 | 0.20 | 58 | 0.35 |
| | B. Vaccination/Medication | No. of Animals | 30 | 0.02 | 16 | 0.01 | 34 | 0.02 | 59 | 0.04 |
| | C. Artificial Insemination | No. of Animals | 34 | 0.01 | 16 | 0.01 | 34 | 0.01 | 59 | 0.02 |
| | D. Natural Service. | He Buffalo | 1 | 0.24 | 0 | 0.00 | 0 | 0.00 | 3 | 0.72 |
| | **Total for Ag. Production System** | | | **10.88** | | **0.58** | | **5.47** | | **8.24** |
| **Total** | | | | **70.75** | | **3.74** | | **35.57** | | **53.59** |

**Cont.**

| Sr. No. | Particular of Measures/Activities | Unit | Sikuva | | Jaspura | | Amara | | Padohara | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No., Length / ha, Volume | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| I | **Soil & Water Conservation Measures** | | | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 2511 | 1.19 | 5034 | 2.38 | 7796 | 3.69 | 0.00 | 0.00 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 4034 | 2.29 | 8089 | 4.60 | 12527 | 7.12 | 0.00 | 0.00 |
| | **B- <u>Water Resource Development</u>** | | | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 9285 | 7.70 | 18617 | 15.45 | 28830 | 23.92 | - | - |
| | 1a- Water storing capacity | cum. | 3701 | 0.00 | 7421 | 0.00 | 11492 | 0.00 | - | - |
| | 1b. Area proposed for irrigation | ha | 6 | 0.00 | 12 | 0.00 | 19 | 0.00 | - | - |
| | 2. Water Harvesting Bund with surplushing structure | No. | 2027 | 2.26 | 4065 | 4.52 | 6295 | 7.00 | - | - |
| | 2a-Water storing capacity | cum. | 632 | 0.00 | 1267 | 0.00 | 1963 | 0.00 | - | - |
| | 2b. Area proposed for irrigation by WHB | ha | 1 | 0.00 | 2 | 0.00 | 3 | 0.00 | - | - |
| | **Sub Total** | | | **13.44** | | **26.95** | | **41.73** | | **0.00** |
| II | **<u>Livelihood for landless People</u>** | | | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 1/10 | 0.25 | 2/20 | 0.50 | 4/40 | 1.00 | - | - |
| | 2. Back Yard Poultry | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 5/50 | 1.25 | - | - |
| | 3. Poultry (Broiler) | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 2/20 | 0.50 | - | - |
| | 4. Black Smithy | -do- | 1/10 | 0.25 | 1/10 | 0.25 | 2/20 | 0.50 | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5. Rope Making (Linseed) | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 2/20 | 0.50 | - | - |
| | 6. Tailoring | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 3/30 | 0.75 | - | - |
| | 7. Vermi composting | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 3/30 | 0.75 | - | - |
| | 8. Fruit Processing | -do- | 1/10 | 0.25 | 2/20 | 0.50 | 3/30 | 0.75 | - | - |
| | 9. Seed Bank | -do- | 1/10 | 0.16 | 2/20 | 0.58 | 3/30 | 0.71 | - | - |
| | **Sub Total** | | 9/90 | 2.16 | 17/170 | 4.33 | 27/270 | 6.71 | - | - |
| III | **Agriculture Production System** | | | | | | | | | |
| | **(1)SMC Area** | | | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 3/1.2 | 0.14 | 5/2.0 | 0.24 | 9/3.6 | 0.43 | - | - |
| | 2. Chickpea | -do- | 3/1.2 | 0.16 | 5/2.0 | 0.27 | 9/3.6 | 0.49 | - | - |
| | 3. Field Pea | -do- | 3/1.2 | 0.17 | 5/2.0 | 0.29 | 9/3.6 | 0.52 | - | - |
| | 4. Til | -do- | 3/1.2 | 0.05 | 5/2.0 | 0.08 | 9/3.6 | 0.15 | - | - |
| | 5. Urd | -do- | 3/1.2 | 0.11 | 5/2.0 | 0.18 | 9/3.6 | 0.32 | - | - |
| | 6. Moong | -do- | 3/1.2 | 0.11 | 5/2.0 | 0.18 | 9/3.6 | 0.33 | - | - |
| | 7. Arhar | -do- | 3/1.2 | 0.09 | 5/2.0 | 0.15 | 9/3.6 | 0.27 | - | - |
| | 8. Wheat | -do- | 3/1.2 | 0.17 | 5/2.0 | 0.29 | 9/3.6 | 0.52 | - | - |
| | **(2) Water Resource Area:** | | | | | | | | | |
| | **B- Production of seeds** | | | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 3/1.2 | 0.14 | 5/2.0 | 0.24 | 9/3.6 | 0.43 | - | - |
| | 2. Chickpea | -do- | 3/1.2 | 0.16 | 5/2.0 | 0.27 | 9/3.6 | 0.49 | - | - |
| | 3. Field Pea | -do- | 3/1.2 | 0.17 | 5/2.0 | 0.29 | 9/3.6 | 0.52 | - | - |
| | 4. Til | -do- | 3/1.2 | 0.05 | 5/2.0 | 0.08 | 9/3.6 | 0.15 | - | - |
| | 5. Urd | -do- | 3/1.2 | 0.11 | 5/2.0 | 0.18 | 10/4.0 | 0.35 | - | - |
| | 6. Moong | -do- | 3/1.2 | 0.11 | 5/2.0 | 0.18 | 10/4.0 | 0.36 | - | - |
| | 7. Arhar | -do- | 2/0.8 | 0.06 | 5/2.0 | 0.15 | 10/4.0 | 0.30 | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 8. Wheat | -do- | 2/0.8 | 0.12 | 5/2.0 | 0.29 | 10/4.0 | 0.58 | - | - |
| | **Agro forestry:-** | | | | | | | | | |
| | 1- Aonla | Area in ha | 1 | 0.18 | 2 | 0.36 | 2 | 0.36 | - | - |
| | 2. Guava | Area in ha | 1 | 0.18 | 2 | 0.36 | 2 | 0.36 | - | - |
| | **Live Stock Management** | | | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 16 | 0.10 | 37 | 0.22 | 42 | 0.25 | - | - |
| | B. Vaccination/Medication | No. of Animals | 19 | 0.01 | 37 | 0.02 | 42 | 0.03 | - | - |
| | C. Artificial Insemination | No. of Animals | 19 | 0.01 | 37 | 0.01 | 42 | 0.02 | - | - |
| | D. Natural Service. | He Buffalo | 0 | 0.00 | 2 | 0.48 | 1 | 0.24 | - | - |
| | **Total for Ag. Production System** | | | **2.40** | | **4.81** | | **7.45** | | - |
| **Total** | | | | **15.60** | | **31.28** | | **48.44** | | - |

**Cont.**

| Sr. No. | Particular of Measures/Activities | Unit | Nadadev | | Madauli Khaurd | | Amara | |
|---|---|---|---|---|---|---|---|---|
| | | No., Length / ha, Volume | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| I | **Soil & Water Conservation Measures** | | | | | | | |
| | **A- Moisture Conservation Measures** | | | | | | | |
| | 1. Peripheral Bund (with Sodding) | cum. | 4482 | 2.12 | 628 | 0.30 | 46789 | 22.15 |
| | 2.Submergence Bundhi (with Sodding) | cum. | 7201 | 4.09 | 1009 | 0.57 | 75180 | 42.72 |
| | **B- Water Resource Development** | | | | | | | |
| | 1. Check Dam / Drop Spill Way | No. | 16574 | 13.75 | 2321 | 1.93 | 173028 | 143.56 |
| | 1a- Water storing capacity | cum. | 6606 | 0.00 | 925 | 0.00 | 68970 | |
| | 1b. Area proposed for irrigation | ha | 11 | 0.00 | 2 | 0.00 | 115 | |
| | 2. Water Harvesting Bund with surplushing structure | No. | 3619 | 4.03 | 507 | 0.56 | 37779 | 42.03 |
| | 2a-Water storing capacity | cum. | 1128 | 0.00 | 158 | 0.00 | 11780 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2b. Area proposed for irrigation by WHB | ha | 2 | 0.00 | 0.3 | 0.00 | 20 | |
| | **Sub Total** | | | **23.99** | | **3.36** | | **250.46** |
| II | **Livelihood for landless People** | | | | | | | |
| | 1. Goatary | No. of SHGs/ No. of beneficiaries | 2/20 | 0.50 | 1/10 | 0.25 | 22/220 | 5.50 |
| | 2. Back Yard Poultry | -do- | 2/20 | 0.50 | 0 | 0.00 | 22/220 | 5.50 |
| | 3. Poultry (Broiler) | -do- | 2/20 | 0.50 | 0 | 0.00 | 18/180 | 4.50 |
| | 4. Black Smithy | -do- | 1/10 | 0.25 | 0 | 0.00 | 14/140 | 3.50 |
| | 5. Rope Making (Linseed) | -do- | 1/10 | 0.25 | 0 | 0.00 | 14/140 | 3.50 |
| | 6. Tailoring | -do- | 1/10 | 0.25 | 0 | 0.00 | 14/140 | 3.50 |
| | 7. Vermi composting | -do- | 2/20 | 0.50 | 0 | 0.00 | 16/160 | 4.00 |
| | 8. Fruit Processing | -do- | 2/20 | 0.50 | 0 | 0.00 | 19/190 | 4.75 |
| | 9. Seed Bank | -do- | 2/20 | 0.61 | 1/10 | 0.29 | 22/220 | 5.50 |
| | **Sub Total** | | 15/150 | 3.86 | 2/20 | 0.54 | **161/1610** | **40.25** |
| III | **Agriculture Production System** | | | | | | | |
| | **(1)SMC Area** | | | | | | | |
| | **A- Crop Demonstrations- (Crop Wise)** | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 6/2.4 | 0.28 | 1/0.4 | 0.05 | 56/22.4 | 2.66 |
| | 2. Chickpea | -do- | 6/2.4 | 0.33 | 1/0.4 | 0.05 | 55/22.0 | 2.99 |
| | 3. Field Pea | -do- | 6/2.4 | 0.34 | 1/0.4 | 0.06 | 54/21.6 | 3.10 |
| | 4. Til | -do- | 6/2.4 | 0.10 | 1/0.4 | 0.02 | 54/21.6 | 0.91 |
| | 5. Urd | -do- | 6/2.4 | 0.21 | 1/0.4 | 0.04 | 54/21.6 | 1.91 |
| | 6. Moong | -do- | 6/2.4 | 0.22 | 1/0.4 | 0.04 | 54/21.6 | 1.97 |
| | 7. Arhar | -do- | 6/2.4 | 0.18 | 1/0.4 | 0.03 | 54/21.6 | 1.59 |
| | 8. Wheat | -do- | 6/2.4 | 0.35 | 1/0.4 | 0.06 | 54/21.6 | 3.12 |
| | **(2) Water Resource Area:** | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **B- Production of seeds** | | | | | | | |
| | 1. Lentil | No. of farmers / Area (ha) | 6/2.4 | 0.28 | 1/0.4 | 0.05 | 54/21.6 | 2.56 |
| | 2. Chickpea | -do- | 6/2.4 | 0.33 | 1/0.4 | 0.05 | 54/21.6 | 2.94 |
| | 3. Field Pea | -do- | 6/2.4 | 0.34 | 1/0.4 | 0.06 | 54/21.6 | 3.10 |
| | 4. Til | -do- | 6/2.4 | 0.10 | 1/0.4 | 0.02 | 54/21.6 | 0.91 |
| | 5. Urd | -do- | 6/2.4 | 0.21 | 1/0.4 | 0.04 | 54/21.6 | 1.91 |
| | 6. Moong | -do- | 6/2.4 | 0.22 | 1/0.4 | 0.04 | 53/21.2 | 1.93 |
| | 7. Arhar | -do- | 6/2.4 | 0.18 | 0 | 0.00 | 53/21.2 | 1.56 |
| | 8. Wheat | -do- | 6/2.4 | 0.35 | 0 | 0.00 | 51/20.4 | 2.95 |
| | **Agro forestry:-** | | | | | | | |
| | 1- Aonla | Area in ha | 0 | 0.00 | 0 | 0.00 | 16 | 2.88 |
| | 2. Guava | Area in ha | 0 | 0.00 | 0 | 0.00 | 11 | 1.98 |
| | **Live Stock Management** | | | | | | | |
| | A. fodder production | Farmers/ No. of Units | 37 | 0.02 | 0 | 0.00 | 292 | 1.75 |
| | B. Vaccination/Medication | No. of Animals | 37 | 0.01 | 16 | 0.01 | 290 | 0.18 |
| | C. Artificial Insemination | No. of Animals | 0 | 0.00 | 17 | 0.01 | 295 | 0.12 |
| | D. Natural Service. | He Buffalo | 37 | 0.02 | 0 | 0.00 | 7 | 1.68 |
| | **Total for Ag. Production System** | | | **4.28** | | **0.60** | | **44.72** |
| **Total** | | | | **27.85** | | **3.90** | | **335.43** |

## DESIGN AND ESTIMATES OF CHECKDAM

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Design of surplusing arrangement No. 1 to be constructed along with WHB** | | | | | | | | |
| **HYDROLOGIC DESIGN** | | | | | | | | |
| Area (ha) | 25 | | | | | | | |
| slope | 0.0021 | | | | | | | |
| K | 7.47 | | | | | | | |
| a | 0.17 | | | | | | | |
| b | 0.75 | | | | | | | |
| n | 0.96 | | | | | | | |
| **Time of Concentration** | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Le.77 | Se-0.385 | | | | | | |
| **L (m)** | 700 | **155.14** | | | | | | | |
| **S** | 0.0021 | | **10.655** | | | | | | |
| | | hour | Tc + b | | (tc+b) power n | | | | |
| **Tc** | **32.185** | 0.5364 | 1.2864 | | 1.274 | | | | |
| **Intensity** | | | | | | | | | |
| | | Tr power a | | | | | | | |
| Tr | 10 | 1.4791 | | | | | | | |
| **I** | | 8.6758 | | | | | | | |
| **Discharge** | | | | | | | | | |
| | | | Taken | | | | | | |
| | c | 0.5 | Coeff | | | | | | |
| | I | 86.758 | mm/hr | | | | | | |
| | A | 25 | ha | | | | | | |
| | Q | 3.0124 | | | Cumec | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HYDRAULIC DESIGN** | | | | | | | | |
| | Length of crest weir (m) | | **2** | | | | | |
| | Weir height (m) | | h | | | | | |
| | | Q = 1.71*L*h power (3/2) | | | | | | |
| | | h power 3/2 | 0.8808 | | | | | |
| | | | | Taken | | | | |
| | | h | 0.919 | **0.8** | h1 | | | |
| | | h + free board | 0.9649 | **0.95** | | | | |
| | **Height of WHB** | | 2.35 | | | | | |
| | **Height of water drop (H)** | | 1.40 | | Say | **1.4** | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STABILITY ANALYSIS** | | | | | | | | | | | | |
| | Let | | | **Top width (m)** | t | **0.7** | | | | | | |
| | | | | **Bottom width (m)** | T | **1.5** | | | | | | |
| | Weight of dam per unit length (kg) | | | | W | 3388 | | W square | **11478544** | | | |
| | Horizontzl water pressure (Kg) | | | | P | 980 | | P square | **960400** | | | |
| | Uplift pressure (kg) | | | | U | (T*w*H)/2 | **1050** | | | | | |
| | Net downword force (kg) | | | | Wn | W-U | **2338** | Wn Square | **5466244** | | | |
| | Resultant (kg) | | | | R | | | | **2535.082642** | | | |
| | | | | | H | 1.4 | | | | | | |
| | | | | | Xbar | | **0.574242** | | | | | |
| | | | | | Z | | **0.228951** | | | | | |
| | Point of Resultant (xbar+Z) | | | | | | **0.803194** | | | | | |
| | | | | | EA | | 0.925758 | | | | | |
| | | | | | P*H/3 | | 457.3333 | | | | | |
| | | | | | W*EA | | 3136.467 | | | | | |
| | | | | | b/6 | | 0.25 | | | | | |
| | | | | | b/2 | | 0.75 | | | | | |
| | | e = xbar+Z-b/2 | | | e (OF) | | 0.053194 | | | | | |
| | | fmax = Wn/b(1+6*e/b) | | | fmax | | 1890.311 | | | | | |
| **A Safety against sliding** | | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | (mu*W)/P | | **1.192857** | | | | |
| **B Safety against overturning** | | | | | (W*EA)/(P*H/3) | | **2.082255** | | | | |
| **C Safety against Tension** | | | | | e<b/6 or b/6-e should be +ive | | **0.196806** | | | | |
| **D Safety against Crushing** | | | | Permiss comp Stress kg/sqm | | say | **10000** | | | | |
| | | | | PCS-fmax should be +ive | | | **8109.689** | | | | |
| **Depth of Foundation** | | | | | | | | | | | |
| | | | Normal scour depth, dn | | 0.473[Q/f]power1/3 | | | | | | |
| | | | | Q (cumec) | 3.012 | | | | | | |
| | | | | Q (Cusec) | 106.3 | | | | | | |
| | | | | f is silt factor, take= | | 1 | | | | | |
| | | | | [q/f] | | 106.302 | | | | | |
| | | | | [q/f] power1/3 | | 4.73711 | | | | | |
| | | | | dn (ft) | | 2.24065 | | | | | |
| | | | | dn (m) | | 0.68313 | | | | | |
| | | | Maximum scour depth, dm | | | 1.5*dn | **1.02469** | | | | |
| | | | | | | | | Technical Specification | | | |
| | | | Foundation depth, D | | | 1.33 dm | **1.36284** | | **1.50** | | |
| **Minimum length of headwall extension (m)** | | | | E=3h+0.6 or 1.5F whichever is greater | | | | | | | |
| | | | | F is net drop from top of transverse sill to crest | | | | | | | |
| | | | | St= height of transverse sill= h/3 | | | | 0.31666 | **0.30** | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 7 | | | | |
| | | | | F (m) | 1.1 | | | | | | | |
| | | | | E (m) | 3.45 | or | 1.65 | say | **3.00** | | | |
| **Length of Basin Lb** | | | | | | | | | | | | |
| | | | Lb (m)= F(2.28*h/F+0.52) | | | 2.738 | | say | **2.70** | | | |
| **Height of the sidewall at end sill is taken to be minimum 1.5h1,but more than H/2** | | | | | | | | | | | | |
| | | | | J (m) | 1.5h1 | 1.2 | more than H/2 | 0.7 | **1.20** | | | |
| **Height of the sidewall at the weir end** | | | | | | | | | | | | |
| | | | | Equal to gully depth | 2.35 | | | | **2.35** | | | |
| | | | | | | | | | | | | |
| | | | | M (m) | 2(F+1.33h-J) | | | 2.327 | **2.30** | | | |
| | | | | K (m) | Lb+.1-M | | | 0.473 | **0.90** | | | |
| **Length of Wing wall (WL)** | | | | | | | | | | | | |
| | | | | WL = 2.25h | | | | 2.1375 | **2.00** | | | |
| **Depth of Toe Wall** | | | | | | | | | | | | |
| | | | | h1+0.1 | | | | 0.9 | **1.00** | | | |

**WORK ABSTRACT**

| Sl. No. | Item | Specification (m) | | | Quantity (cum) | | | |
|---|---|---|---|---|---|---|---|---|
| | | **Length** | **Breadth** | **Depth** | | | | |
| **1** | **Clearing of site (Removal of trees, shrubs and bushes)** | 8.00 | 10.00 | | | | | |
| **2** | **Earth work** | | | | | | | |
| | a) in hard soil Headwall Foundation | 2.00 | 2.50 | 1.00 | 5.00 | Effective depth will be 0.7 m | | |
| | b) in hard soil RHS of Headwall extension | 3.00 | 2.50 | 1.20 | 9.00 | " | | |
| | c) in hard soil LHS of Headwall extension | 3.00 | 2.50 | 1.20 | 9.00 | " | | |
| | d) in hard soil cutoff wall | 8.00 | 1.60 | 0.80 | 10.24 | | | |
| | e)in hard soil side wall on both side | 6.40 | 2.00 | 2.00 | 25.60 | Effective depth will be 1.25 m | | |
| | f) in hard soil Toe wall | 2.00 | 1.60 | 1.00 | 3.20 | Effective depth will be 1.00 m | | |
| | g) in hard soil Wing wall on both side | 4.00 | 1.80 | 1.50 | 10.80 | " | | |
| | h) Apron | 2.70 | 2.30 | 0.50 | 3.11 | | | |
| | | | | **Total** | **75.95** | | | |
| **3** | **Cement concrete** | | | | | | | |
| | Cement Concrete (1:2:4) | | | | | | | |
| | a) Head wall coping | 2.00 | 0.70 | 0.10 | 0.14 | | | |
| | b) Apron | 2.70 | 2.30 | 0.10 | 0.62 | | | |
| | c) End sill coping | 2.30 | 0.50 | 0.10 | 0.12 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Total | **0.88** | | | |
| | Cement Concrete (1:4:8) | | | | | | | |
| | d) Toe wall | 2.30 | 0.70 | 0.10 | 0.16 | | | |
| | e) Apron | 2.70 | 2.30 | 0.10 | 0.62 | | | |
| | f) Side wall on both side | 6.40 | 1.10 | 0.10 | 0.70 | | | |
| | g) Wing wall on both side | 4.00 | 1.00 | 0.10 | 0.40 | | | |
| | h)Headwall and Headwall Extension | 8.00 | 1.60 | 0.10 | 1.28 | | | |
| | | | | **Total** | **3.17** | | | |
| **4** | **Requirement of sand to nullify the impact of cracks** | | | | | | | |
| | a) Below cutoff wall | 8.00 | 0.70 | 0.05 | 0.28 | | | |
| | b)Below Headwall and headwall extension | 8.00 | 1.60 | 0.05 | 0.64 | | | |
| | c) Below side wall on both sides | 6.40 | 1.10 | 0.05 | 0.35 | | | |
| | d) Below wing wall on both side | 4.00 | 1.00 | 0.05 | 0.20 | | | |
| | e) Below apron | 2.70 | 2.30 | 0.05 | 0.31 | | | |
| | f) Below Toe wall | 2.30 | 0.70 | 0.05 | 0.08 | | | |
| | | | | **Total** | **1.86** | | | |
| **5** | **Stone Masonary in CM 1:4** | | | | | | | |
| | a) Corewall | 8.00 | 0.60 | 0.80 | 3.84 | | | |
| | b) Headwall and Headwall Extension on both side-Foundation | 8.00 | 1.50 | 0.70 | 8.40 | | | |
| | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 8.00 | 1.10 | 1.40 | 12.32 | Width=(0.7+1.5)/2= 1.10 m | | |
| | d) Headwall Extension on both the side above crest | 6.00 | 0.70 | 0.95 | 3.99 | | | |
| | e) Foundation for side wall on both side | 6.00 | 1.10 | 1.25 | 8.25 | | | |
| | f) Side wall on both side -super structure (K Part)-I | 1.80 | 1.00 | 0.80 | 1.44 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II | 1.80 | 0.80 | 0.40 | 0.58 | | | |
| | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 1.80 | 0.70 | 0.60 | 0.76 | | | |
| | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV | 1.80 | 0.60 | 0.55 | 0.59 | | | |
| | j) Side wall on both side-Super structure (M Part)-I | 4.60 | 1.00 | 0.80 | 3.68 | | | |
| | k) Side wall on both side-Super structure (M Part)-II | 4.60 | 0.80 | 0.40 | 1.47 | | | |
| | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 4.60 | 0.70 | 0.575 | 1.85 | Avg. ht. of triangle portion= | 0.575 | |
| | m) Foundation for wing wall on both side | 4.00 | 0.80 | 1.00 | 3.20 | | | |
| | n) Wing wall on both side-Super structure-Part- I | 4.00 | 0.70 | 0.60 | 1.68 | | | |
| | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II | 4.00 | 0.60 | 0.30 | 0.72 | Avg. ht. of triangle portion= | 0.30 | |
| | p) Toe wall: Part I | 2.30 | 0.70 | 0.50 | 0.81 | | | |
| | q) Toe wall: Part II | 2.30 | 0.60 | 0.50 | 0.69 | | | |
| | r) Transverse Sill | 2.30 | 0.50 | 0.30 | 0.35 | | | |
| | s) Apron | 2.70 | 2.30 | 0.25 | 1.55 | | | |
| | | | | | **56.16** | | | |
| **6** | **M S Bar (10 mm, q)** | | | | **1.50** | | | |
| **7** | **Providing rough stone pitching in u/s (both side)** | 35.00 | 2.35 | 0.20 | **16.45** | | | |

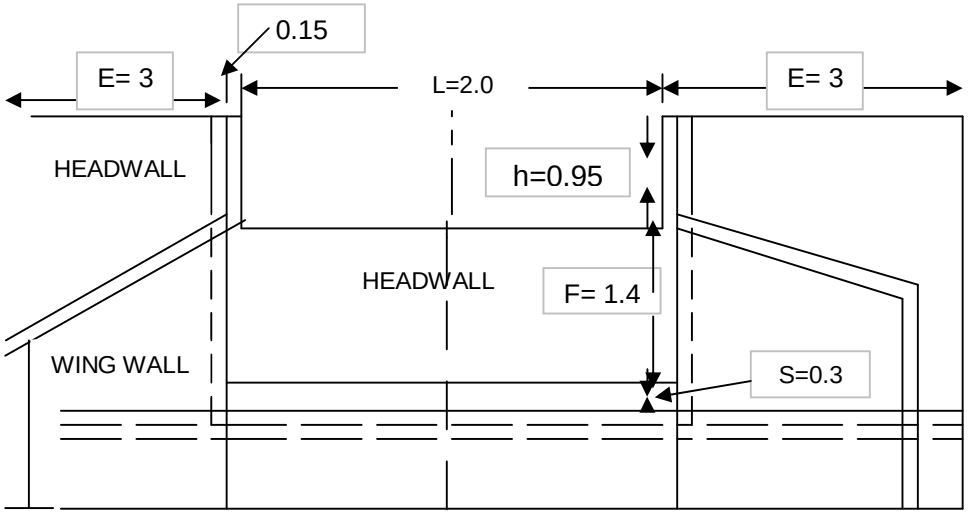
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **8** | **Cement pointing to stone masonary in CM 1:3 (sqm)** | | | | | | | |
| | a) Headwall both side + Extension u/s only | 8.00 | | 1.40 | 11.20 | | | |
| | b) Side wall both side (RHS and LHS)-Part I | 6.40 | | 1.20 | 7.68 | | | |
| | c) Side wall both side (RHS and LHS)-Part II | 1.80 | | 1.15 | 2.07 | | | |
| | d) Side wall both side (RHS and LHS)-Part-III | 4.60 | | 0.575 | 2.65 | Avg. ht. of triangle portion= | 0.575 | |
| | e) Wing wall both side-Part I | 4.00 | | 0.60 | 2.40 | | | |
| | f) Wing wall both side-Part I | 4.00 | | 0.30 | 1.20 | Avg. ht. of triangle portion= | 0.30 | |
| | | | | **Total** | **27.20** | | | |
| **9** | **Filling of black clay soil in the up stream (free from any kind of gravel)** | | | | **5.00** | trolly | | |

| MATERIAL ABSTRACT | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Required Quantiy | | | | | | |
| | | | | | | Quantiy,cum | Cement,bags | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1 | Cement Concrete mix (1:2:4): 12 mm conc. | | | | | 0.88 | 5.61 | 0.39 | 0.79 | | | |
| 2 | Cement Concrete mix (1:4:8); 20 mm conc. | | | | | 3.17 | 10.76 | 1.49 | 2.98 | | | |
| 3 | Stone Maspnary in CM 1:4 | | | | | 56.16 | 140.41 | 19.10 | | 56.16 | | |
| 4 | MS Bar for reinforcing | | | | | | | | | | | 1.50 |
| 5 | Boulder for pitching | | | | | 16.45 | | | | | 16.45 | |
| 6 | Cement pointing to stone masonary in CM 1:3 (sqm) | | | | | 27.20 | 1.69 | 0.17 | | | | |
| 7 | Black clay soil (gravel free) | | | | | 5.00 | | | | | | |
| 8 | Requirement of sand to nullify the impact of cracks | | | | | | | 1.86 | | | | |
| | | | | | **Total** | | **158.46** | **23.01** | | **56.16** | **16.45** | **1.50** |

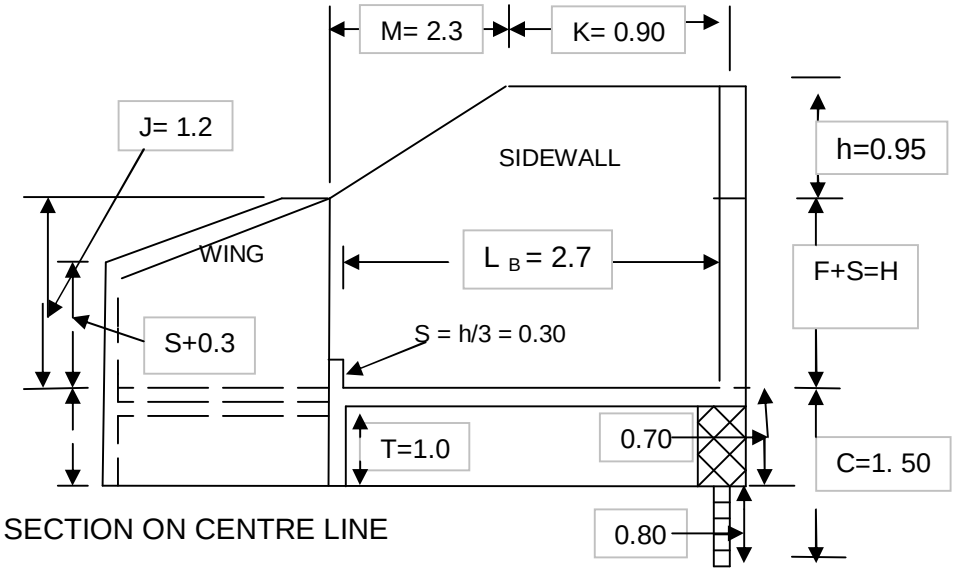
**COST ABSTRACT**

| | Sl. No. | Item | Quantity | Unit | Rate (Rs./Unit) | Amount (Rs.) |
|---|---|---|---|---|---|---|
| A | 1 | Cement | 158 | Bag | 300.00 | 47538.57 |
| | 2 | Sand (good quality) | 23.01 | $m^3$ | 900.00 | 20710.47 |
| | 3 | Concrete-12 mm | 0.79 | $m^3$ | 1300.00 | 1024.92 |
| | 4 | Concrete-20 mm | 2.98 | $m^3$ | 1200.00 | 3571.25 |
| | 5 | Khanda (8"x8"x8") | 56.16 | $m^3$ | 1000.00 | 56162.00 |
| | 6 | M S Bar (10 mm Saria) | 1.50 | q | 4500.00 | 6750.00 |
| | 7 | Boulder | 16.45 | $m^3$ | 700.00 | 11515.00 |
| | 8 | Filling of black clay soil in the up stream (free from any kind of gravel) | 5.00 | Trolly | 700.00 | 3500.00 |
| | | | | | **Total** | **150772.20** |
| B | 9 | Water supply through tanker @ 3 % of material cost | | | | 4523.17 |
| C | 10 | Labour Charges @ 35% | | | | 52770.27 |
| | | | | | **Total (A+B+C)** | **208065.64** |
| | 11 | Misc. @ 3% | | | | 6241.97 |
| | | | | | **G. Total** | **214307.61** |
| | | **Rs. 2,14,308/- (Rs. Two lakh fourteen thousand three hundred eight only)** | | | | |

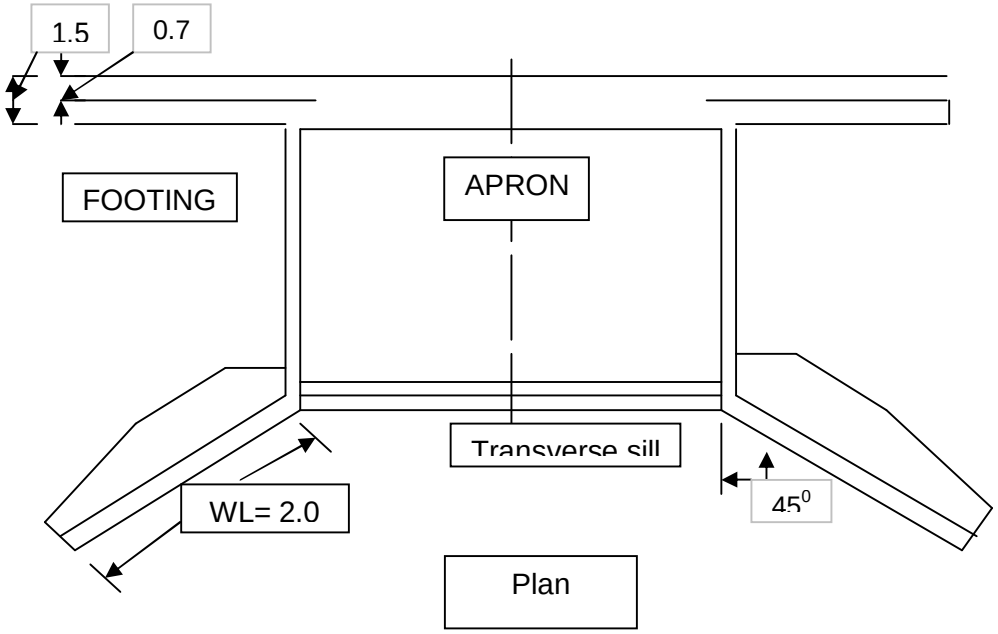
**Note: The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time**




DOWN STREAM ELEVATION




SECTION ON CENTRE LINE




L = Length of weir
h = Depth of weir
F = Drop through spillway from crest of weir to top of transverse sill
S = Height of transverse sill
$L_B$ = Length of Apron
T = Depth of toewall below top of apron
C = Depth of cutoff wall below top of apron
E = Length of headwall extension
J = Height of wingwall & sidewall at junction

DESIGNED BY:-
DR. R.C. SACHAN
EX. SPECIAL SCIENTIST, (LAND &WATER MANAGEMENT)
ICRISAT, PATANCHERU, A.P.

Note: Figure not to scale, All dimensions are in Metre

**Technical Details of Outlet No. 1 to be constructed along with WHB**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Design of surplusing arrangement No. 2 to be constructed along with WHB** | | | | | | | | | | |
| **HYDROLOGIC DESIGN** | | | | | | | | | | |
| Area (ha) | 20 | | | | | | | | | |
| slope | 0.0022 | | | | | | | | | |
| K | 7.47 | | | | | | | | | |
| a | 0.17 | | | | | | | | | |
| b | 0.75 | | | | | | | | | |
| n | 0.96 | | | | | | | | | |
| **Time of Concentration** | | | | | | | | | | |
| | | Le.77 | Se-0.385 | | | | | | | |
| **L (m)** | 600 | **137.78** | | | | | | | | |
| **S** | 0.0022 | | **10.61** | | | | | | | |
| | | hour | Tc + b | | (tc+b) power n | | | | | |
| **Tc** | **28.462** | 0.4744 | 1.2244 | | 1.214 | | | | | |
| **Intensity** | | | | | | | | | | |
| | | Tr power a | | | | | | | | |
| Tr | 10 | 1.4791 | | | | | | | | |
| **I** | | 9.0976 | | | | | | | | |
| **Discharge** | | | | | | | | | | |
| | | | Taken | | | | | | | |
| | c | 0.5 | Coeff | | | | | | | |
| | I | 90.976 | mm/hr | | | | | | | |
| | A | 20 | ha | | | | | | | |
| | Q | 2.5271 | | | Cumec | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HYDRAULIC DESIGN** | | | | | | | | | |
| | Length of crest weir (m) | | **1.75** | | | | | | |
| | Weir height (m) | | h | | | | | | |
| | | Q = 1.71*L*h power (3/2) | | | | | | | |
| | | h power 3/2 | 0.8445 | | | | | | |
| | | | | Taken | | | | | |
| | | h | 0.8935 | **0.9** | h1 | | | | |
| | | h + free board | 0.9382 | **0.95** | | | | | |
| | **Height of WHB** | | 2.20 | | | | | | |
| | **Height of water drop (H)** | | 1.25 | | Say | **1.25** | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **STABILITY ANALYSIS** | | | | | | | | | |
| | Let | | | **Top width (m)** | t | **0.6** | | | |
| | | | | **Bottom width (m)** | T | **1.3** | | | |
| | Weight of dam per unit length (kg) | | | | W | 2612.5 | | W square | **6825156.25** |
| | Horizontzl water pressure (Kg) | | | | P | 781.25 | | P square | **610351.5625** |
| | Uplift pressure (kg) | | | | U | (T*w*H)/2 | **812.5** | | |
| | Net downword force (kg) | | | | Wn | W-U | **1800** | Wn Square | **3240000** |
| | Resultant (kg) | | | | R | | | | **1962.231271** |
| | | | | | H | 1.25 | | | |
| | | | | | Xbar | | **0.496491** | | |
| | | | | | Z | | **0.209354** | | |
| | Point of Resultant (xbar+Z) | | | | | | **0.705845** | | |
| | | | | | EA | | 0.803509 | | |
| | | | | | P*H/3 | | 325.5208 | | |
| | | | | | W*EA | | 2099.167 | | |
| | | | | | b/6 | | 0.216667 | | |
| | | | | | b/2 | | 0.65 | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | e = xbar+Z-b/2 | | | | e (OF) | | 0.055845 | | |
| | | fmax = Wn/b(1+6*e/b) | | | | fmax | | 1741.494 | | |
| **A Safety against sliding** | | | | | | | | | | |
| | | | | | (mu*W)/P | | | **1.152** | | |
| **B Safety against overturning** | | | | | (W*EA)/(P*H/3) | | | **2.04004** | | |
| **C Safety against Tension** | | | | | e<b/6 or b/6-e should be +ive | | | **0.160822** | | |
| **D Safety against Crushing** | | | | Permiss comp Stress kg/sqm | | | say | **10000** | | |
| | | | | PCS-fmax should be +ive | | | | **8258.506** | | |
| **Depth of Foundation** | | | | | | | | | | |
| | | | Normal scour depth, dn | | | 0.473[Q/f]power1/3 | | | | |
| | | | | Q (cumec) | 2.527 | | | | | |
| | | | | | | | | | | |
| | | | | Q (Cusec) | 89.18 | | | | | |
| | | | | f is silt factor, take= | | 1 | | | | |
| | | | | [q/f] | | 89.1755 | | | | |
| | | | | [q/f] power1/3 | | 4.46768 | | | | |
| | | | | dn (ft) | | 2.11321 | | | | |
| | | | | dn (m) | | 0.64427 | | | | |
| | | | Maximum scour depth, dm | | | 1.5*dn | **0.96641** | | | |
| | | | | | | | | | Technical Specification | |
| | | | Foundation depth, D | | | 1.33 dm | **1.28532** | | **1.40** | |
| **Minimum length of headwall extension (m)** | | | | E=3h+0.6 or 1.5F whichever is greater | | | | | | |
| | | | | F is net drop from top of transverse sill to crest | | | | | | |
| | | | | St= height of transverse sill= h/3 | | | | 0.316667 | **0.30** | |
| | | | | F (m) | 0.95 | | | | | |
| | | | | E (m) | 3.45 | or | 1.425 | say | **3.00** | |
| **Length of Basin Lb** | | | | | | | | | | |
| | | | Lb (m)= F(2.28*h/F+0.52) | | | 2.66 | | say | **2.50** | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Height of the sidewall at end sill is taken to be minimum 1.5h1,but more than H/2** | | | | | | | | | | |
| | | | | J (m) | 1.5h1 | 1.35 | more than H/2 | 0.625 | **1.20** | |
| **Height of the sidewall at the weir end** | | | | | | | | | | |
| | | | | Equal to gully depth | 2.2 | | | | **2.20** | |
| | | | | M (m) | 2(F+1.33h-J) | | | 2.027 | **2.00** | |
| | | | | | | | | | | |
| | | | | K (m) | Lb+.1-M | | | 0.573 | **1.00** | |
| **Length of Wing wall (WL)** | | | | | | | | | | |
| | | | | WL = 2.25h | | | | 2.1375 | **2.00** | |
| **Depth of Toe Wall** | | | | | | | | | | |
| | | | | h1+0.1 | | | | 1 | **1.00** | |

**WORK ABSTRACT**

| **Sl. No.** | **Item** | **Specification (m)** | | | **Quantity (cum)** | | | |
|---|---|---|---|---|---|---|---|---|
| | | **Length** | **Breadth** | **Depth** | | | | |
| **1** | **Clearing of site (Removal of trees, shrubs and bushes)** | 8.00 | 10.00 | | | | | |
| **2** | **Earth work** | | | | | | | |
| | a) in hard soil Headwall Foundation | 1.75 | 2.50 | 1.00 | 4.38 | Effective depth will be 0.7 m | | |
| | b) in hard soil RHS of Headwall extension | 3.00 | 2.50 | 1.20 | 9.00 | " | | |
| | c) in hard soil LHS of Headwall extension | 3.00 | 2.50 | 1.20 | 9.00 | " | | |
| | d) in hard soil cutoff wall | 7.75 | 1.60 | 0.70 | 8.68 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | e)in hard soil side wall on both side | 6.00 | 2.00 | 2.00 | 24.00 | Effective depth will be 1.25 m | | |
| | f) in hard soil Toe wall | 1.75 | 1.60 | 1.00 | 2.80 | Effective depth will be 1.00 m | | |
| | g) in hard soil Wing wall on both side | 4.00 | 1.80 | 1.50 | 10.80 | " | | |
| | h) Apron | 2.50 | 2.00 | 0.50 | 2.50 | | | |
| | | | | **Total** | **71.16** | | | |
| **3** | **Cement concrete** | | | | | | | |
| | Cement Concrete (1:2:4) | | | | | | | |
| | a) Head wall coping | 1.75 | 0.60 | 0.10 | 0.11 | | | |
| | b) Apron | 2.50 | 2.00 | 0.10 | 0.50 | | | |
| | c) End sill coping | 2.00 | 0.50 | 0.10 | 0.10 | | | |
| | | | | Total | **0.71** | | | |
| | Cement Concrete (1:4:8) | | | | | | | |
| | d) Toe wall | 2.00 | 0.70 | 0.10 | 0.14 | | | |
| | e) Apron | 2.50 | 2.00 | 0.10 | 0.50 | | | |
| | f) Side wall on both side | 6.00 | 1.10 | 0.10 | 0.66 | | | |
| | g) Wing wall on both side | 4.00 | 1.00 | 0.10 | 0.40 | | | |
| | h)Headwall and Headwall Extension | 7.75 | 1.60 | 0.10 | 1.24 | | | |
| | | | | **Total** | **2.94** | | | |
| **4** | **Requirement of sand to nullify the impact of cracks** | | | | | | | |
| | a) Below cutoff wall | 7.75 | 0.70 | 0.05 | 0.27 | | | |
| | b)Below Headwall and headwall extension | 7.75 | 1.30 | 0.05 | 0.50 | | | |
| | c) Below side wall on both sides | 6.00 | 1.10 | 0.05 | 0.33 | | | |
| | d) Below wing wall on both side | 4.00 | 1.00 | 0.05 | 0.20 | | | |
| | e) Below apron | 2.50 | 2.00 | 0.05 | 0.25 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | f) Below Toe wall | 2.00 | 0.70 | 0.05 | 0.07 | | | |
| | | | | **Total** | **1.63** | | | |
| **5** | **Stone Masonary in CM 1:4** | | | | | | | |
| | a) Corewall | 7.75 | 0.60 | 0.70 | 3.26 | | | |
| | b) Headwall and Headwall Extension on both side-Foundation | 7.75 | 1.30 | 0.70 | 7.05 | | | |
| | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 7.75 | 0.95 | 1.25 | 9.20 | Width=(0.6+1.3)/2= 0.95 m | | |
| | d) Headwall Extension on both the side above crest | 6.00 | 0.60 | 0.95 | 3.42 | | | |
| | e) Foundation for side wall on both side | 6.00 | 1.10 | 1.25 | 8.25 | | | |
| | f) Side wall on both side -super structure (K Part)-I | 2.00 | 1.00 | 0.80 | 1.60 | | | |
| | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II | 2.00 | 0.80 | 0.40 | 0.64 | | | |
| | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 2.00 | 0.70 | 0.60 | 0.84 | | | |
| | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV | 2.00 | 0.60 | 0.40 | 0.48 | | | |
| | j) Side wall on both side-Super structure (M Part)-I | 4.00 | 1.00 | 0.80 | 3.20 | | | |
| | k) Side wall on both side-Super structure (M Part)-II | 4.00 | 0.80 | 0.40 | 1.28 | | | |
| | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 4.00 | 0.70 | 0.500 | 1.40 | Avg. ht. of triangle portion= | 0.500 | |
| | m) Foundation for wing wall on both side | 4.00 | 0.80 | 1.00 | 3.20 | | | |

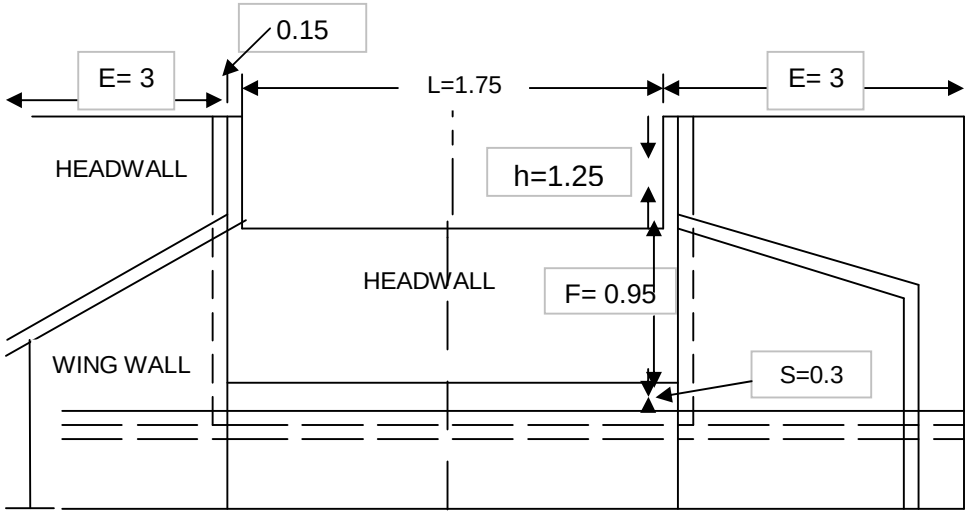
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | n) Wing wall on both side-Super structure-Part- I | 4.00 | 0.70 | 0.60 | 1.68 | | | |
| | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II | 4.00 | 0.60 | 0.30 | 0.72 | Avg. ht. of triangle portion= | 0.30 | |
| | p) Toe wall: Part I | 2.00 | 0.70 | 0.50 | 0.70 | | | |
| | q) Toe wall: Part II | 2.00 | 0.60 | 0.50 | 0.60 | | | |
| | r) Transverse Sill | 2.00 | 0.50 | 0.30 | 0.30 | | | |
| | s) Apron | 2.50 | 2.00 | 0.25 | 1.25 | | | |
| | | | | | **49.07** | | | |
| **6** | **M S Bar (10 mm, q)** | | | | **1.25** | | | |
| **7** | **Providing rough stone pitching in u/s (both side)** | 35.00 | 2.20 | 0.20 | **15.40** | | | |
| **8** | **Cement pointing to stone masonary in CM 1:3 (sqm)** | | | | | | | |
| | a) Headwall both side + Extension u/s only | 7.75 | | 1.25 | 9.69 | | | |
| | b) Side wall both side (RHS and LHS)-Part I | 6.00 | | 1.20 | 7.20 | | | |
| | c) Side wall both side (RHS and LHS)-Part II | 2.00 | | 1.00 | 2.00 | | | |
| | d) Side wall both side (RHS and LHS)-Part-III | 4.00 | | 0.500 | 2.00 | Avg. ht. of triangle portion= | 0.500 | |
| | e) Wing wall both side-Part I | 4.00 | | 0.60 | 2.40 | | | |
| | f) Wing wall both side-Part I | 4.00 | | 0.30 | 1.20 | Avg. ht. of triangle portion= | 0.30 | |
| | | | | **Total** | **24.49** | | | |
| **9** | **Filling of black clay soil in the up stream (free from any kind of gravel)** | | | | **5.00** | trolly | | |

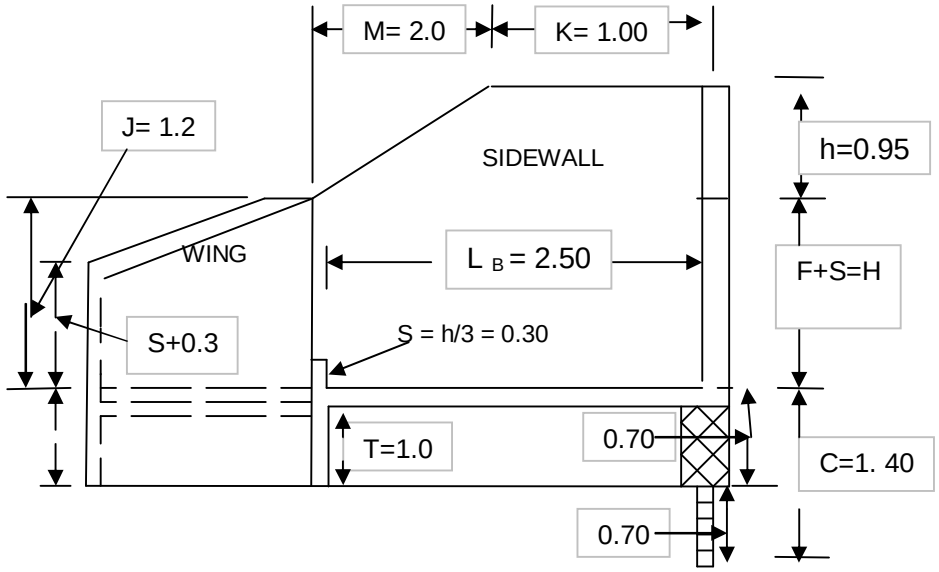
| MATERIAL ABSTRACT | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Required Quantiy | | | | | | |
| | | | | | | Quantiy,cum | Cement,bags | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1 | Cement Concrete mix (1:2:4): 12 mm conc. | | | | | 0.71 | 4.51 | 0.32 | 0.63 | | | |
| 2 | Cement Concrete mix (1:4:8); 20 mm conc. | | | | | 2.94 | 10.00 | 1.38 | 2.76 | | | |
| 3 | Stone Maspnary in CM 1:4 | | | | | 49.07 | 122.68 | 16.68 | | 49.07 | | |
| 4 | MS Bar for reinforcing | | | | | | | | | | | 1.25 |
| 5 | Boulder for pitching | | | | | 15.40 | | | | | 15.40 | |
| 6 | Cement pointing to stone masonary in CM 1:3 (sqm) | | | | | 24.49 | 1.52 | 0.15 | | | | |
| 7 | Black clay soil (gravel free) | | | | | 5.00 | | | | | | |
| 8 | Requirement of sand to nullify the impact of cracks | | | | | | | 1.63 | | | | |
| | | | | | **Total** | | **138.70** | **20.16** | | **49.07** | **15.40** | **1.25** |

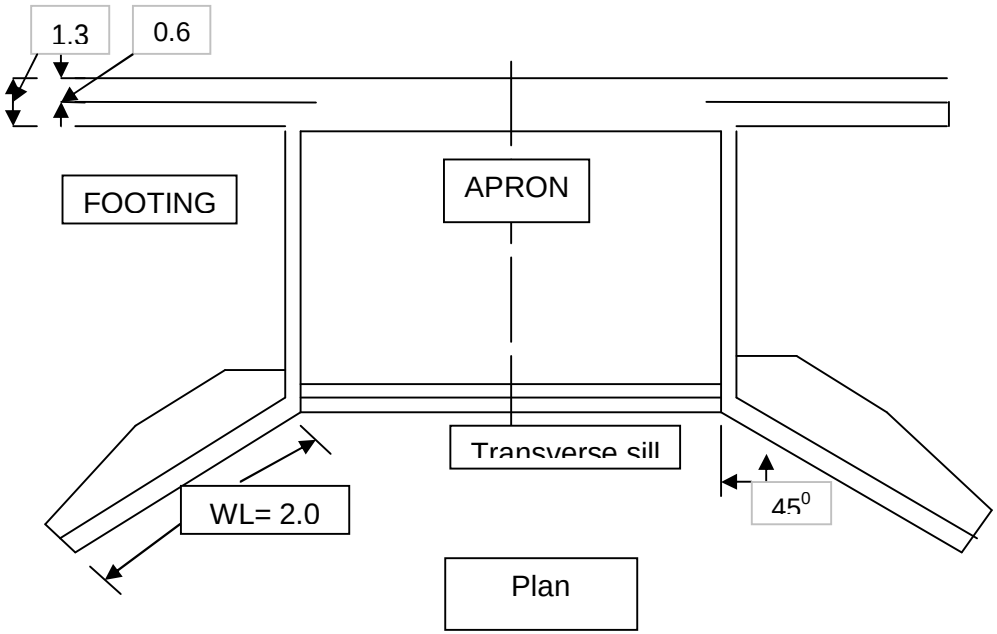
**COST ABSTRACT**

| | Sl. No. | Item | Quantity | Unit | Rate (Rs./Unit) | Amount (Rs.) |
|---|---|---|---|---|---|---|
| A | 1 | Cement | 139 | Bag | 300.00 | 41610.84 |
| | 2 | Sand (good quality) | 20.16 | $m^3$ | 900.00 | 18146.10 |
| | 3 | Concrete-12 mm | 0.63 | $m^3$ | 1300.00 | 824.85 |
| | 4 | Concrete-20 mm | 2.76 | $m^3$ | 1200.00 | 3316.32 |
| | 5 | Khanda (8"x8"x8") | 49.07 | $m^3$ | 1000.00 | 49070.63 |
| | 6 | M S Bar (10 mm Saria) | 1.25 | q | 4500.00 | 5625.00 |
| | 7 | Boulder | 15.40 | $m^3$ | 700.00 | 10780.00 |
| | 8 | Filling of black clay soil in the up stream (free from any kind of gravel) | 5.00 | Trolly | 700.00 | 3500.00 |
| | | | | | **Total** | **132873.73** |
| B | 9 | Water supply through tanker @ 3 % of material cost | | | | 3986.21 |
| C | 10 | Labour Charges @ 35% | | | | 46505.81 |
| | | | | | **Total (A+B+C)** | **183365.75** |
| | 11 | Misc. @ 3% | | | | 5500.97 |
| | | | | | **G. Total** | **188866.72** |
| | | **Rs.1,88,867/- (Rs. One lakh eighty eight thousand eight hundred sixty seven only)** | | | | |

**Note: The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time**




L = Length of weir
h = Depth of weir
F = Drop through spillway from crest of weir to top of transverse sill
S = Height of transverse sill
$L_B$ = Length of Apron
T = Depth of toewall below top of apron
C = Depth of cutoff wall below top of apron
E = Length of headwall extension
J = Height of wingwall & sidewall at junction

DESIGNED BY:-
DR. R.C. SACHAN
EX. SPECIAL SCIENTIST, (LAND &WATER MANAGEMENT)
ICRISAT, PATANCHERU, A.P.

Note: Figure not to scale, All dimensions are in Metre

**Technical Details of Outlet No. 2 to be constructed along with WHB**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Design of surplusing arrangement No. 3 to be constructed along with WHB** | | | | | | | | | | |
| **HYDROLOGIC DESIGN** | | | | | | | | | | |
| Area (ha) | 15 | | | | | | | | | |
| slope | 0.002 | | | | | | | | | |
| K | 7.47 | | | | | | | | | |
| a | 0.17 | | | | | | | | | |
| b | 0.75 | | | | | | | | | |
| n | 0.96 | | | | | | | | | |
| **Time of Concentration** | | | | | | | | | | |
| | | Le.77 | Se-0.385 | | | | | | | |
| **L (m)** | 500 | **119.73** | | | | | | | | |
| **S** | 0.002 | | **10.942** | | | | | | | |
| | | hour | Tc + b | | (tc+b) power n | | | | | |
| **Tc** | **25.508** | 0.4251 | 1.1751 | | 1.168 | | | | | |
| **Intensity** | | | | | | | | | | |
| | | Tr power a | | | | | | | | |
| Tr | 10 | 1.4791 | | | | | | | | |
| **I** | | 9.4632 | | | | | | | | |
| **Discharge** | | | | | | | | | | |
| | | | Taken | | | | | | | |
| | c | 0.4 | Coeff | | | | | | | |
| | I | 94.632 | mm/hr | | | | | | | |
| | A | 15 | ha | | | | | | | |
| | Q | 1.5772 | | | Cumec | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **HYDRAULIC DESIGN** | | | | | | | | | | |
| | Length of crest weir (m) | | | **1.25** | | | | | | |
| | Weir height (m) | | | h | | | | | | |
| | | Q = 1.71*L*h power (3/2) | | | | | | | | |
| | | h power 3/2 | | 0.7379 | | | | | | |
| | | | | | Taken | | | | | |
| | | h | | 0.8167 | **0.7** | h1 | | | | |
| | | h + free board | | 0.8576 | **0.75** | | | | | |
| | **Height of WHB** | | | 1.75 | | | | | | |
| | **Height of water drop (H)** | | | 1.00 | | Say | **1** | | | |
| **STABILITY ANALYSIS** | | | | | | | | | | |
| | Let | | | **Top width (m)** | | t | **0.5** | | | |
| | | | | **Bottom width (m)** | | T | **1.1** | | | |
| | Weight of dam per unit length (kg) | | | | | W | 1760 | | W square | **3097600** |
| | Horizontzl water pressure (Kg) | | | | | P | 500 | | P square | **250000** |
| | Uplift pressure (kg) | | | | | U | (T*w*H)/ 2 | **550** | | |
| | Net downword force (kg) | | | | | Wn | W-U | **1210** | Wn Square | **1464100** |
| | Resultant (kg) | | | | | R | | | | **1309.236419** |
| | | | | | | H | 1 | | | |
| | | | | | | Xbar | | **0.41875** | | |
| | | | | | | Z | | **0.161415** | | |
| | Point of Resultant (xbar+Z) | | | | | | | **0.580165** | | |
| | | | | | | EA | | 0.68125 | | |
| | | | | | | P*H/3 | | 166.6667 | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W*EA | | 1199 | | |
| | | | | | | b/6 | | 0.183333 | | |
| | | | | | | b/2 | | 0.55 | | |
| | | e = xbar+Z-b/2 | | | | e (OF) | | 0.030165 | | |
| | | fmax = Wn/b(1+6*e/b) | | | | fmax | | 1280.992 | | |
| **A Safety against sliding** | | | | | | | | | | |
| | | | | | (mu*W)/P | | | **1.21** | | |
| **B Safety against overturning** | | | | | (W*EA)/(P*H/3) | | | **2.104998** | | |
| **C Safety against Tension** | | | | | e<b/6 or b/6-e should be +ive | | | **0.153168** | | |
| **D Safety against Crushing** | | | | Permiss comp Stress kg/sqm | | | say | **10000** | | |
| | | | | PCS-fmax should be +ive | | | | **8719.008** | | |
| **Depth of Foundation** | | | | | | | | | | |
| | | | Normal scour depth, dn | | | 0.473[Q/f]power1/3 | | | | |
| | | | | Q (cumec) | 1.577 | | | | | |
| | | | | Q (Cusec) | 55.66 | | | | | |
| | | | | f is silt factor, take= | | 1 | | | | |
| | | | | [q/f] | | 55.6554 | | | | |
| | | | | [q/f] power1/3 | | 3.818 | | | | |
| | | | | dn (ft) | | 1.80591 | | | | |
| | | | | dn (m) | | 0.55058 | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Maximum scour depth, dm | | | 1.5*dn | **0.82587** | | | |
| | | | | | | | | | Technical Specification | |
| | | | Foundation depth, D | | | 1.33 dm | **1.09841** | | **1.10** | |
| **Minimum length of headwall extension (m)** | | | | E=3h+0.6 or 1.5F whichever is greater | | | | | | |
| | | | | F is net drop from top of transverse sill to crest | | | | | | |
| | | | | St= height of transverse sill= h/3 | | | | 0.25 | **0.25** | |
| | | | | F (m) | 0.75 | | | | | |
| | | | | E (m) | 2.85 | or | 1.125 | say | **2.50** | |
| **Length of Basin Lb** | | | | | | | | | | |
| | | | Lb (m)= F(2.28*h/F+0.52) | | | 2.1 | | say | **2.00** | |
| **Height of the sidewall at end sill is taken to be minimum 1.5h1,but more than H/2** | | | | | | | | | | |
| | | | | J (m) | 1.5h1 | 1.05 | more than H/2 | 0.5 | **1.00** | |
| **Height of the sidewall at the weir end** | | | | | | | | | | |
| | | | | Equal to gully depth | 1.75 | | | | **1.75** | |
| | | | | M (m) | 2(F+1.33h-J) | | | 1.495 | **1.50** | |
| | | | | K (m) | Lb+.1-M | | | 0.605 | **1.00** | |
| **Length of Wing wall (WL)** | | | | | | | | | | |
| | | | | WL = 2.25h | | | | 1.6875 | **1.75** | |
| **Depth of Toe Wall** | | | | | | | | | | |
| | | | | h1+0.1 | | | | 0.8 | **0.80** | |

**WORK ABSTRACT**

| Sl. No. | Item | Specification (m) | | | Quantity (cum) | | | |
|---|---|---|---|---|---|---|---|---|
| | | Length | Breadth | Depth | | | | |
| 1 | **Clearing of site (Removal of trees, shrubs and bushes)** | 8.00 | 10.00 | | | | | |
| 2 | **Earth work** | | | | | | | |
| | a) in hard soil Headwall Foundation | 1.25 | 2.10 | 1.00 | 2.63 | Effective depth will be 0.7 m | | |
| | b) in hard soil RHS of Headwall extension | 2.50 | 2.10 | 1.20 | 6.30 | " | | |
| | c) in hard soil LHS of Headwall extension | 2.50 | 2.10 | 1.20 | 6.30 | " | | |
| | d) in hard soil cutoff wall | 6.25 | 1.60 | 0.40 | 4.00 | | | |
| | e)in hard soil side wall on both side | 5.00 | 2.00 | 1.50 | 15.00 | Effective depth will be 1 m | | |
| | f) in hard soil Toe wall | 1.50 | 1.60 | 1.00 | 2.40 | Effective depth will be 1.00 m | | |
| | g) in hard soil Wing wall on both side | 3.50 | 1.80 | 1.50 | 9.45 | " | | |
| | h) Apron | 2.00 | 1.50 | 0.50 | 1.50 | | | |
| | | | | **Total** | **47.58** | | | |
| 3 | **Cement concrete** | | | | | | | |
| | Cement Concrete (1:2:4) | | | | | | | |
| | a) Head wall coping | 1.25 | 0.50 | 0.10 | 0.06 | | | |
| | b) Apron | 2.00 | 1.50 | 0.10 | 0.30 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | c) End sill coping | 1.50 | 0.50 | 0.10 | 0.08 | | | |
| | | | | Total | **0.44** | | | |
| | Cement Concrete (1:4:8) | | | | | | | |
| | d) Toe wall | 1.50 | 0.70 | 0.10 | 0.11 | | | |
| | e) Apron | 2.00 | 1.50 | 0.10 | 0.30 | | | |
| | f) Side wall on both side | 5.00 | 1.10 | 0.10 | 0.55 | | | |
| | g) Wing wall on both side | 3.50 | 1.00 | 0.10 | 0.35 | | | |
| | h)Headwall and Headwall Extension | 6.25 | 1.60 | 0.10 | 1.00 | | | |
| | | | | **Total** | **2.31** | | | |
| **4** | **Requirement of sand to nullify the impact of cracks** | | | | | | | |
| | a) Below cutoff wall | 6.25 | 0.70 | 0.05 | 0.22 | | | |
| | b)Below Headwall and headwall extension | 6.25 | 1.20 | 0.05 | 0.38 | | | |
| | c) Below side wall on both sides | 5.00 | 1.10 | 0.05 | 0.28 | | | |
| | d) Below wing wall on both side | 3.50 | 1.00 | 0.05 | 0.18 | | | |
| | e) Below apron | 2.00 | 1.50 | 0.05 | 0.15 | | | |
| | f) Below Toe wall | 1.50 | 0.70 | 0.05 | 0.05 | | | |
| | | | | **Total** | **1.25** | | | |
| | | | | | | | | |
| **5** | **Stone Masonary in CM 1:4** | | | | | | | |
| | a) Corewall | 6.25 | 0.60 | 0.40 | 1.50 | | | |
| | b) Headwall and Headwall Extension on both side-Foundation | 6.25 | 1.10 | 0.70 | 4.81 | | | |
| | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 6.25 | 0.80 | 1.00 | 5.00 | Width=(0.5+1.1)/2= 0.8 m | | |
| | d) Headwall Extension on both the side above crest | 5.00 | 0.50 | 0.75 | 1.88 | | | |
| | e) Foundation for side wall on both side | 5.00 | 0.90 | 1.00 | 4.50 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | f) Side wall on both side -super structure (K Part)-I | 2.00 | 0.80 | 0.50 | 0.80 | | | |
| | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II | 2.00 | 0.70 | 0.50 | 0.70 | | | |
| | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 2.00 | 0.60 | 0.50 | 0.60 | | | |
| | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV | 2.00 | 0.50 | 0.25 | 0.25 | | | |
| | j) Side wall on both side-Super structure (M Part)-I | 3.00 | 0.90 | 0.50 | 1.35 | | | |
| | k) Side wall on both side-Super structure (M Part)-II | 3.00 | 0.80 | 0.50 | 1.20 | | | |
| | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 3.00 | 0.70 | 0.375 | 0.79 | Avg. ht. of triangle portion= | 0.375 | |
| | m) Foundation for wing wall on both side | 3.50 | 0.70 | 1.00 | 2.45 | | | |
| | n) Wing wall on both side-Super structure-Part- I | 3.50 | 0.60 | 0.55 | 1.16 | | | |
| | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II | 3.50 | 0.50 | 0.23 | 0.39 | Avg. ht. of triangle portion= | 0.23 | |
| | p) Toe wall: Part I | 1.50 | 0.70 | 0.50 | 0.53 | | | |
| | q) Toe wall: Part II | 1.50 | 0.60 | 0.30 | 0.27 | | | |
| | r) End Sill | 1.50 | 0.50 | 0.25 | 0.19 | | | |
| | s) Apron | 2.00 | 1.50 | 0.25 | 0.75 | | | |
| | | | | | **29.11** | | | |
| **6** | **M S Bar (10 mm, q)** | | | | **1.00** | | | |

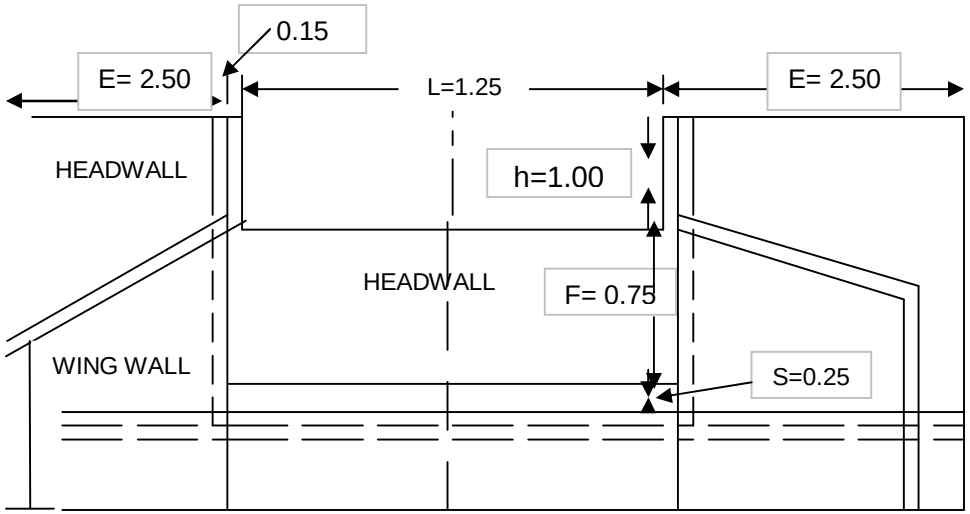
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **7** | **Providing rough stone pitching in u/s (both side)** | 35.00 | 1.75 | 0.20 | **12.25** | | | |
| **8** | **Cement pointing to stone masonary in CM 1:3 (sqm)** | | | | | | | |
| | a) Headwall both side + Extension u/s only | 6.25 | | 1.00 | 6.25 | | | |
| | b) Side wall both side (RHS and LHS)-Part I | 5.00 | | 1.00 | 5.00 | | | |
| | c) Side wall both side (RHS and LHS)-Part II | 2.00 | | 0.75 | 1.50 | | | |
| | d) Side wall both side (RHS and LHS)-Part-III | 3.00 | | 0.375 | 1.13 | Avg. ht. of triangle portion= | 0.375 | |
| | e) Wing wall both side-Part I | 3.50 | | 0.55 | 1.93 | | | |
| | f) Wing wall both side-Part I | 4.00 | | 0.23 | 0.90 | Avg. ht. of triangle portion= | 0.23 | |
| | | | | **Total** | **16.70** | | | |
| **9** | **Filling of black clay soil in the up stream (free from any kind of gravel)** | | | | **4.00** | trolly | | |

| MATERIAL ABSTRACT | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Required Quantiy | | | | | | |
| | | | | | | Quantiy,cum | Cement,bags | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1 | Cement Concrete mix (1:2:4): 12 mm conc. | | | | | 0.44 | 2.80 | 0.20 | 0.39 | | | |
| 2 | Cement Concrete mix (1:4:8); 20 mm conc. | | | | | 2.31 | 7.84 | 1.08 | 2.17 | | | |
| 3 | Stone Maspnary in CM 1:4 | | | | | 29.11 | 72.77 | 9.90 | | 29.11 | | |
| 4 | MS Bar for reinforcing | | | | | | | | | | | 1.00 |
| 5 | Boulder for pitching | | | | | 12.25 | | | | | 12.25 | |
| 6 | Cement pointing to stone masonary in CM 1:3 (sqm) | | | | | 16.70 | 1.04 | 0.11 | | | | |
| 7 | Black clay soil (gravel free) | | | | | 4.00 | | | | | | |
| 8 | Requirement of sand to nullify the impact of cracks | | | | | | | 1.25 | | | | |
| | | | | | **Total** | | **84.44** | **12.53** | | **29.11** | **12.25** | **1.00** |

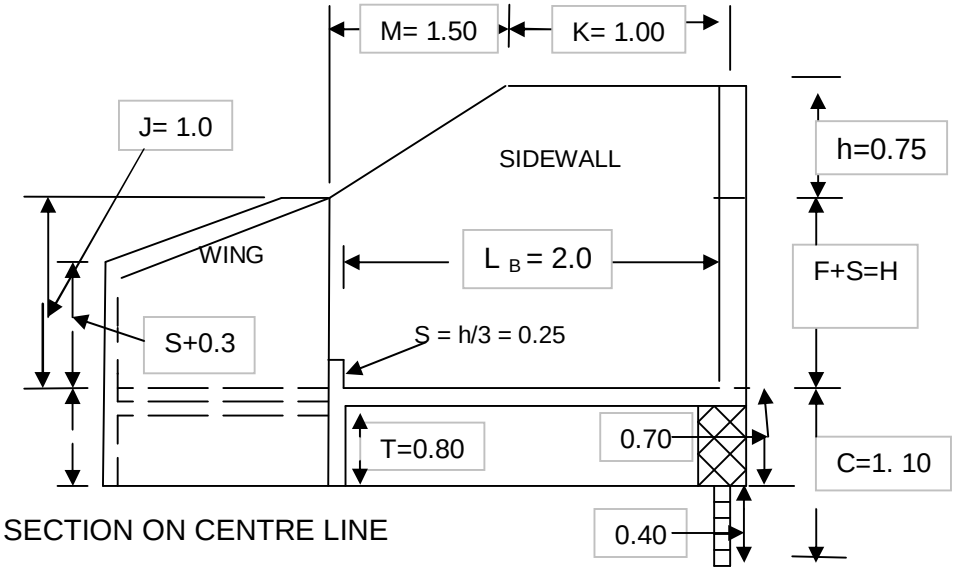
**COST ABSTRACT**

| | Sl. No. | Item | Quantity | Unit | Rate (Rs./Unit) | Amount (Rs.) |
|---|---|---|---|---|---|---|
| A | 1 | Cement | 84 | Bag | 300.00 | 25331.41 |
| | 2 | Sand (good quality) | 12.53 | $m^3$ | 900.00 | 11275.03 |
| | 3 | Concrete-12 mm | 0.39 | $m^3$ | 1300.00 | 511.88 |
| | 4 | Concrete-20 mm | 2.17 | $m^3$ | 1200.00 | 2600.04 |
| | 5 | Khanda (8"x8"x8") | 29.11 | $m^3$ | 1000.00 | 29106.25 |
| | 6 | M S Bar (10 mm Saria) | 1.00 | q | 4500.00 | 4500.00 |
| | 7 | Boulder | 12.25 | $m^3$ | 700.00 | 8575.00 |
| | 8 | Filling of black clay soil in the up stream (free from any kind of gravel) | 4.00 | Trolly | 700.00 | 2800.00 |
| | | | | | **Total** | **84699.60** |
| B | 9 | Water supply through tanker @ 3 % of material cost | | | | 2540.99 |
| C | 10 | Labour Charges @ 35% | | | | 29644.86 |
| | | | | | **Total (A+B+C)** | **116885.45** |
| | 11 | Misc. @ 3% | | | | 3506.56 |
| | | | | | **G. Total** | **120392.01** |
| | | **Rs. 1,20,392/- (Rs. One lakh twenty thousand three hundred ninety two only)** | | | | |

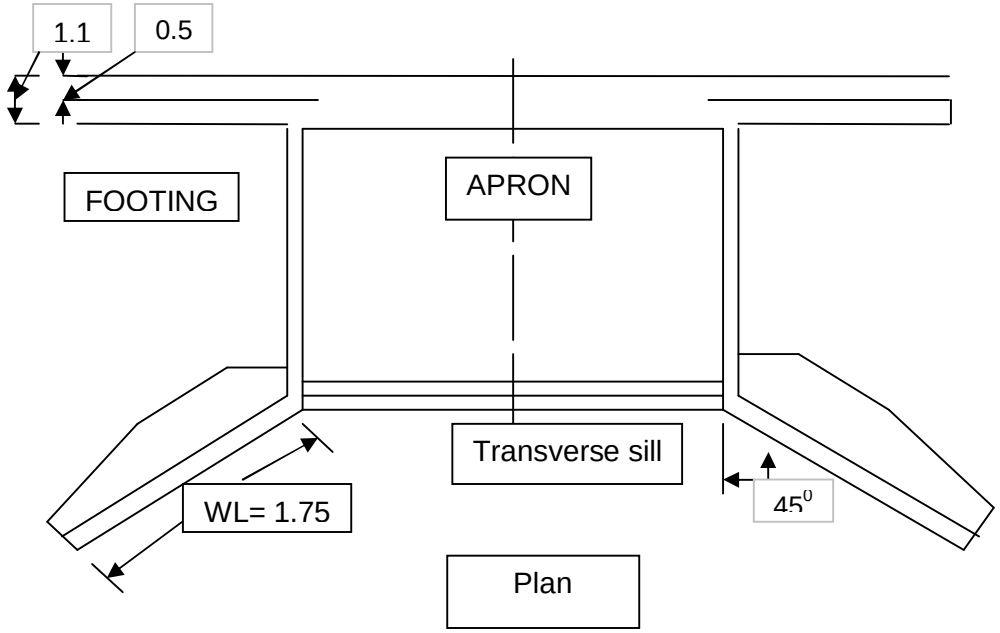
**Note: The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time**




DOWN STREAM ELEVATION




SECTION ON CENTRE LINE




Note: Figure not to scale, All dimensions are in Metre

L = Length of weir
h = Depth of weir
F = Drop through spillway from crest of weir to top of transverse sill
S = Height of transverse sill
$L_B$ = Length of Apron
T = Depth of toewall below top of apron
C = Depth of cutoff wall below top of apron
E = Length of headwall extension
J = Height of wingwall & sidewall at junction

DESIGNED BY:-
DR. R.C. SACHAN
EX. SPECIAL SCIENTIST, (LAND &WATER MANAGEMENT)
ICRISAT, PATANCHERU, A.P.

**Technical Details of Outlet No. 3 to be constructed along with WHB**

# CHAPTER - 6

## CAPACITY BUILDING PLAN

The capacity building of various stake holders will be given very high priority as the watershed is to be developed in participatory mode. Capacity building initiative plays very important role in human resource development of model watershed to replicate and train other watershed resource persons. The capacity building initiatives include training to government officials, CBOs, farmers and PIAs through field days, hands-on trainings, exposure visits to successful watersheds, training materials and etc. Need-based specialized training courses will be conducted. The details of the training institutes for capacity building and training to stake holders on participatory watershed management are summarized in Table 6.1 and 6.2, respectively.

**Table 6.1: List of identified training institutes for capacity building***

| Sr. No. | Name of the Training Institute | Full Address with contact no, website & e-mail | Designation of the Head of Institute | Type of Institute | Area(s) of specialization | No. of training assigned | No. of persons to be trained | Allocation to be made to the institute |
|---|---|---|---|---|---|---|---|---|
| 1. | Krishi Vigyan Kendra | Kamasin, Banda | Programme Coordinator | Agriculture University | Extension Agronomy Home Science Soil Science | 16 | 800 | Proposal with budget will be received |
| 2. | National Research Center for Agro-Forestry | Gwalior Road, Jhansi | Director | GOI, (ICAR) | Agro-forestry and NRM on watershed basis | 16 | 800 | -do- |
| 3 | District Gram Vikash Sansthan | Vikash Bhawan, Banda | Coordinator | State Govt. | Small scale | 4 | 100 | -do- |
| 4 | Indian Institute of Grass Land | Gwalior Road, Jhansi | Director, Jhansi | GoI (ICAR) | Grasses and fodder | 4 | 100 | -do- |
| 5 | Deptt. Of Horticulture | Banda | Deputy Director | State Govt. | Fruit and Vegetable Production | 2 | 50 | -do- |

***Number of trainings and persons may be changed as per the budget available.**

**Table 6.2: Training to stakeholders on participatory watershed management***

| Sl. No. | Client Group | Title of the Programme/Duration/ Time | Objectives | Coverage/Topics | Training Methodology | Training Institutions |
|---|---|---|---|---|---|---|
| 1. | Watershed Committee & WDT members | Planning and implementation of IWMP Project (3 day) | To Strengthen WC and WDT for planning and executing the Project | Natural Resource Management Livelihood options for landless and marginal farmers. Improved Agriculture production system | Lectures, videos and visits to successful watershed | National Research Center for Agro-forestry, Gwalior Road, Jhansi |
| 2. | User Group, SHGs members | Agriculture Production system and specialized training for SHGs (3 day) | To increase the Agriculture productivity and livelihood improvement | Integrated crop management in pulses, cereals, oilseeds, vegetables, orchards and small scale projects related to Agriculture. | Lectures, videos and visits | Krishi Vigyan Kendra, Kamasin, Banda |
| 3 | Watershed Committee & WDT members | Management of natural resources on watershed basis and agroforestry | Awareness and strengthening of knowledge and skills | NRM, Production system and livelihood | Lectures, videos and visits to successful watershed | National Research Center for Agro-forestry, Gwalior Road, Jhansi |
| 4 | Secretaries of WC and WDT/PIA members | Book keeping and record maintenance | Maintenance of record and preparing budget | Cash book and ledger registers, preparing budget, maintenance of accounts | Lectures and practical exercise | National Research Center for Agro-forestry, Gwalior Road, Jhansi |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | PIA/WDT members | Cultivation of fodder in watershed | Awareness and knowledge enhancement | Package of practices of fodder cultivation | Lectures, videos and visits to successful watershed | Indian Grassland and Fodder Research Institute, Jhansi |
| 6. | PIA/WDT/WC members | Knowledge of market and pricing | Awareness and knowledge enhancement | Market intelligence | Lectures, videos and visits | Agriculture Technology Management Agency (ATMA) |
| 7 | PIA/WDT members | Design of SWC structures | Strengthening of knowledge | SWC structures | Lectures, practical exercise and visits to successful watershed | NRCAF, Jhansi / CSWCRTI&RS, Datia, MP |

*Training programs, duration and topics may be change on course of project as per need

# CHAPTER - 7

## PHASING OF PROGRAMME AND BUDGETING

### 7.1 Monitoring and Evaluation

Monitoring of the project will be done at each stage and it will be carried out for both, process and outcome. Some community members will be trained and will be involved in participatory monitoring of various parameters and processes and the crop yields. The interventions, expenditure and other information will be displayed in the micro-watershed through wall writings. Besides trained community members, PIA/DWDC will also monitor the physical and financial progress of watershed development programme. Frontier technologies viz. GIS and Remote Sensing techniques will be used by the PIA/District Watershed Committee Development (DWCD) for monitoring and evaluation. The PIA shall submit quarterly progress reports (countersigned by the Watershed Committee (WC) President) to the DWDC for further submission to the SLNA. Sustainable and unbiased monitoring will be ensured by involving an independent agency to monitor impact assessment subsequently. About 1 per cent of the total budget will be used on this activity.

**Plan for Evaluation**

Watershed development activities bring about both tangible and intangible benefits. In order to quantify the benefits, impact analysis has been proposed.

**Theme**

The watershed development activities will being significant and tangible change in socio-economic status of inhabitants, cropping intensity, ground water recharge, crop diversification, fuel, fodder and small timber availability, livestock composition and milk production, etc. Data on indicators baseline in such parametes with base line data would provide the quantitative information on impact.

**Observations**

The following indicators will be taken into account for quantitative and qualitative assessment. For the purpose, detailed questionnaires will be prepared and field observations will be carried out.

- Duration of availability of drinking water/irrigation and groundwater recharge measure through periodic ground water level in dug well
- Irrigation frequency and area under irrigation
- Changes in cropping pattern and cropping systems in the farmers fields along with productivity and incomes
- Soil health
- Satellite monitoring for vegetation cover and other parameters
- Fuel, fodder and small timber availability
- Livestock composition and productivity

- Periodic pest and disease monitoring will be done in major crops
- Socio-economic aspects including resource inventory
- Following indices will also be worked out as qualitative indicators of the watershed development:
- Land Improvement Index (LII)
- Crop Diversification Index (CDI)
- Cultivated Land Utilization Index (CLUI)
- Crop Fertilization Index (CFI)
- Induced Watershed Eco-Index (IWEI)

The concurrent and post-project monitoring and evaluation would be conducted to assess the status of watershed related interventions. It will be done by an independent agency having similar experiences. About 1 per cent of the total budget will also be used on evaluation.

## 7.2 Annual Action Plan (AAP)

Physical and financial targets and outlays and their year wise break ups are given Table 7.1. Year wise financial phasing for the budget available (Rs. 447.24lakh) with IWMP-XI, district Banda is given in Table 7.2.

**Table 7.1: Physical and financial targets and outlays and their year wise break ups of IWMP-XI, Banda, Banda, U.P.**

| Project - IWMP-XI | | | PIA-Soil Conservatio Unit, Banda-I | | | | | | District- Banda | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No | Physical and financial Targets | Unit | First Year 2011-12 | | Second Year 2012-13 | | Third Year 2013-14 | | Fourth Year 2014-15 | | Total Project | |
| | | | Physical | Financial | Physical | Financial | Physical | Financial | Physical | Financial | Physical | Financial |
| 1 | Administration | | | 2.24 | | 22.36 | | 13.42 | | 6.71 | 0 | 44.72 |
| 2 | Monitoring | | | 0.00 | | 2.24 | | 1.12 | | 1.12 | 0 | 4.47 |
| 3 | Evaluation | | | 0.00 | | 0.89 | | 2.01 | | 1.57 | 0 | 4.47 |
| 4 | **Entry point activities** | No. | | | | | | | | | | |
| | (1) Planned | | 10 | 17.89 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 10 | 17.89 |
| | (a) No. of Activities | No. | 10 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 10 | 0.00 |
| | (b) No. of beneficiaries | No. | 11900 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 11900 | 0.00 |
| | (2) Executed | | 10 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 10 | 0.00 |
| | (c) No. of Activities | No. | 10 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 10 | 0.00 |
| | (d) No. of | No. | 11900 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 11900 | 0.00 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | beneficiaries | | | | | | | | | | | |
| 5 | **Institutional & Capacity Building** | | | | | | | | | | 0 | 0.00 |
| | (1) No. of Persons to be trained | | 156 | 1.12 | 1683 | 11.18 | 1500 | 10.06 | | | 3339 | 22.36 |
| | (a) SLNA level | No. | 30 | 0.27 | 150 | 1.35 | 150 | 1.35 | | | 330 | 2.97 |
| | (b) District level | ,, | 30 | 0.24 | 180 | 1.44 | 180 | 1.44 | | | 390 | 3.12 |
| | (c) PIA level (OFFICIAL/WDT/SECARATERY) | ,, | 30 | 0.21 | 270 | 1.89 | 240 | 1.68 | | | 540 | 3.78 |
| | (c) PIA level (FARMERS) | ,, | 66 | 0.40 | 1083 | 6.50 | 930 | 5.59 | | | 2079 | 12.49 |
| 6 | **DPR Preparation** | MWS No. | 10 | 4.47 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 9 | 4.47 |
| 7 | **Watershed Development Works** | | - | | | | | | | | 0 | 0.00 |
| | (1) SMC | cum | 0 | 0.00 | 60985 | 32.43 | 36591 | 19.46 | 24394 | 12.97 | 121970 | 64.87 |
| | (2) Water Resource Development | | | | | | | | | | 0 | 0.00 |
| | (a) Structures | No. | 0 | | 107 | 92.79 | 64 | 55.68 | 43 | 37.12 | 214 | 185.59 |
| | (b) Storage capacity | cum | | - | 40375 | 0.00 | 24225 | 0.00 | 16150 | - | 80750 | 0.00 |
| | (c) Life saving irrigation area | ha. | | | 67 | 0.00 | 40 | 0.00 | 27 | | 135 | 0.00 |
| | (d) User Groups | No. | | | 107 | | 64 | | 43 | | 214 | 0.00 |
| 8 | **Production system** | | | | | | | | | | | |
| | (1) Agriculture | | | | | | | | | | | |
| | (a) Crop demonstration | | | | | | | | | | | |
| | (1) No. of dem. | No. | 0 | 0.00 | 196 | 8.22 | 196 | 8.22 | 44 | 1.83 | 435 | 18.26 |
| | (2) Area | ha. | | | 78 | | 78 | | 17 | | 174 | 0.00 |
| | (b) Seed Production | | | | | | | | | | | |
| | (1) No. of dem. | No. | 0 | 0.00 | 192 | 8.04 | 192 | 8.04 | 43 | 1.79 | 427 | 17.87 |
| | (2) Area | ha. | 0 | | 77 | | 77 | | 17 | | 171 | 0.00 |
| | (2) Horticulture/ Agri- | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Horticulture | | | | | | | | | | | |
| | (a) Area | ha. | 0 | 0.00 | 12 | 2.19 | 12 | 2.19 | 3 | 0.49 | 27 | 4.86 |
| | (b) No. of Plants | No. | | 0.00 | | | | | | | 0 | 0.00 |
| | (4) Animal husbandry | | | | | | | | | | | |
| | A. fodder production | No. of Units / Farmers | 0 | 0.00 | 131 | 0.79 | 131 | 0.79 | 29 | 0.18 | 292 | 1.75 |
| | B. Vaccination/Medication | No. of Animals | 0 | 0.00 | 131 | 0.08 | 131 | 0.08 | 29 | 0.02 | 290 | 0.18 |
| | C. Artificial Insemination | No. of Animals | 0 | 0.00 | 133 | 0.05 | 133 | 0.05 | 30 | 0.01 | 295 | 0.12 |
| | D. Natural Service. | He Buffalo | 0 | 0.00 | 3 | 0.76 | 3 | 0.76 | 1 | 0.17 | 7 | 1.68 |
| 9 | **Livelihood activities through SHG's** | | | | | | | | | | | |
| | (1) Activity Goatary | | | | | | | | | | | |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | | | | | | | | | | |
| | (2) Activity- Back Yard Poultry | | | | | | | | | | | |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (3) Activity- Poultry , Broiler | | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 8 | 2.03 | 8 | 2.03 | 2 | 0.45 | 18 | 4.50 |
| | (b) No. of members | No. | 0 | 0.00 | 81 | 0.00 | 81 | 0.00 | 18 | 0.00 | 180 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (4) Black Smithy | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (5) Rope making | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (6) Tailoring | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | (8) Vermi Composting | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 7 | 1.80 | 7 | 1.80 | 2 | 0.40 | 16 | 4.00 |
| | (b) No. of members | No. | 0 | 0.00 | 72 | 0.00 | 72 | 0.00 | 16 | 0.00 | 160 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (9) Food processing | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 9 | 2.14 | 9 | 2.14 | 2 | 0.48 | 19 | 4.75 |
| | (b) No. of members | No. | 0 | 0.00 | 86 | 0.00 | 86 | 0.00 | 19 | 0.00 | 190 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (13) Seed Bank | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| 10 | **Consolidation & Withdrawl Phase activities** | | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 13.42 | 0 | 13.42 |
| **Grand Total** | | | | | | | | | | | **623382** | **447.24** |

**Table 7.2: Year wise financial phasing (Rs in Lakh) Project IWMP-XI, Banda- I, Banda, U.P.**

| Particulars | 1st Year | 2nd Year | 3rd Year | 4th Year | Total |
|---|---|---|---|---|---|
| Administrative Cost-10% | 2.24 | 22.36 | 13.42 | 6.71 | 44.72 |
| Monitering-1% | 0.00 | 2.24 | 1.12 | 1.12 | 4.47 |
| Evalution-1% | 0.00 | 0.89 | 2.01 | 1.57 | 4.47 |
| Entry Point Activity-4% | 17.89 | 0.00 | 0.00 | 0.00 | 17.89 |
| Institution & Capacity Building-5% | 1.12 | 11.18 | 10.06 | 0.00 | 22.36 |
| DPR-1% | 4.47 | 0.00 | 0.00 | 0.00 | 4.47 |
| Watershed Dev. Work-56% | 0.00 | 125.23 | 75.14 | 50.09 | 250.45 |
| Livelihood Activity-9% | 0.00 | 18.11 | 18.11 | 4.03 | 40.25 |
| Production System & Micro enterprises-10% | 0.00 | 20.13 | 20.13 | 4.47 | 44.72 |
| Consolidation-3% | 0.00 | 0.00 | 0.00 | 13.42 | 13.42 |
| **Total** | **25.72** | **200.14** | **139.99** | **81.40** | **447.24** |

### 7.3 Details of Convergence

The details of convergence of different developmental schemes are given Chapter 5.

### 7.4 Benefit Cost Analysis

Benefit cost analysis for all micro-watershed and for the project were given in Table 7.3 and 7.4, respectively. The overall B:C ratio for pre and post project is 1.64 and 1.92, respectively,

**Table 7.3: Micro-watershed wise benefit cost analysis of IWMP-XI, Banda**
**Present Outcome (Crops)**

| S. No. | Name of Crop (Season wise) | Area (ha) | Production (quintal) | Productivity q/ha | Cost/ ha | Rate Rs/ q | Gross Return Rs | Gross Return/ha | Total Cost Rs | Net Return | Net Return /ha | B:C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Urd | 327.23 | 948.97 | 2.90 | 10000 | 4800 | 4555042 | 13920 | 1570704 | 2984338 | 9120 | 1.39 |
| 2 | Moong | 126.43 | 354.00 | 2.80 | 9100 | 3300 | 1168213 | 9240 | 417219 | 750994 | 5940 | 1.02 |
| 3 | Arhar | 405.45 | 1986.71 | 4.90 | 13000 | 9000 | 17880345 | 44100 | 3649050 | 14231295 | 35100 | 3.39 |
| 4 | Bajra | 115.18 | 541.35 | 4.70 | 4000 | 1300 | 703750 | 6110 | 149734 | 554016 | 4810 | 1.53 |
| 5 | Sorghum | 523.50 | 3088.65 | 5.90 | 5600 | 2700 | 8339355 | 15930 | 1413450 | 6925905 | 13230 | 2.84 |
| 6 | Til | 221.78 | 399.20 | 1.80 | 7000 | 5000 | 1996020 | 9000 | 1108900 | 887120 | 4000 | 1.29 |
| 7 | Paddy | 450.19 | 4659.47 | 10.35 | 10000 | 2000 | 9318933 | 20700 | 900380 | 8418553 | 18700 | 2.07 |
| | **Total** | **2169.76** | **11978.34** | | | | **43961658** | | **9209437** | **34752221** | | |
| 1 | Wheat | 985.63 | 14242.35 | 14.45 | 12400 | 1300 | 18515054 | 18785 | 1281319 | 17233735 | 17485 | 1.51 |
| 2 | Barley | 793.18 | 9121.57 | 11.50 | 8000 | 1600 | 14594512 | 18400 | 1269088 | 13325424 | 16800 | 2.30 |
| 3 | Masoor | 1404.05 | 6739.44 | 4.80 | 10000 | 3400 | 22914096 | 16320 | 4773770 | 18140326 | 12920 | 1.63 |
| 4 | Gram | 276.64 | 1632.18 | 5.90 | 9000 | 3600 | 5875834 | 21240 | 995904 | 4879930 | 17640 | 2.36 |
| 5 | Field Pea | 432.45 | 2940.66 | 6.80 | 8800 | 2400 | 7057584 | 16320 | 1037880 | 6019704 | 13920 | 1.85 |
| | **Total** | **3891.95** | **34676.20** | | | | **68957080** | | **9357961** | **59599119** | | 1.57 |
| | Cropping Intensity | 108.89 | | | Over All B:C | 1.57 | | | | | | |
| | Cultivable Area | 5566.57 | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (ha) | | | | | | | | | | | |
| | **Total Number of Farm Families in MWS** | **4790** | | | | | | | | | | |
| | Net Return per Household | 12442.4 | | | | | | | | | | |

**Expected Outcome (Crops)**

| S. No. | Name of Crop (Season wise) | Area (ha) | Production (quintal) | Productivity q/ha | Cost/ ha | Rate Rs/ q | Gross Return Rs | Gross Return/ ha | Total Cost Rs | Net Return | Net Return /ha | B:C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Urd | 481.03 | 1587.39 | 3.3 | 10000 | 4800 | 7619485 | 15840 | 2308935 | 5310550 | 11040 | 1.58 |
| 2 | Moong | 185.85 | 538.97 | 2.9 | 9100 | 3300 | 1778605 | 9570 | 613312 | 1165293 | 6270 | 1.05 |
| 3 | Arhar | 596.01 | 3218.46 | 5.4 | 13000 | 9000 | 28966159 | 48600 | 5364104 | 23602055 | 39600 | 3.74 |
| 4 | Bajra | 169.31 | 931.23 | 5.5 | 4000 | 1300 | 1210599 | 7150 | 220109 | 990490 | 5850 | 1.79 |
| 5 | Sorghum | 769.55 | 4848.13 | 6.3 | 5600 | 2700 | 13089960 | 17010 | 2077772 | 11012189 | 14310 | 3.04 |
| 6 | Til | 326.02 | 684.63 | 2.1 | 7000 | 5000 | 3423174 | 10500 | 1630083 | 1793091 | 5500 | 1.50 |
| 7 | Paddy | 661.78 | 8272.24 | 12.5 | 10000 | 2000 | 16544483 | 25000 | 1323559 | 15220924 | 23000 | 2.50 |
| | **Total** | **3189.55** | **20081.07** | | | | **72632465.24** | | **13537872.39** | **59094592.85** | | |
| 1 | Wheat | 1010.2 | 18184.87 | 18 | 12400 | 130 | 23640328 | 23400 | 1313352 | 22326977 | 22100 | 1.89 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | | | | 0 | | | | | | |
| 2 | Barley | 813.01 | 9268.31 | 11.4 | 8000 | 160 0 | 14829293 | 18240 | 1300815 | 13528478 | 16640 | 2.28 |
| 3 | Masoor | 1439.1 5 | 7771.42 | 5.4 | 10000 | 340 0 | 26422817 | 18360 | 4893114 | 21529703 | 14960 | 1.84 |
| 4 | Gram | 283.56 | 1843.11 | 6.5 | 9000 | 360 0 | 6635210 | 23400 | 1020802 | 5614409 | 19800 | 2.60 |
| 5 | Field Pea | 443.26 | 3457.44 | 7.8 | 8800 | 240 0 | 8297851 | 18720 | 1063827 | 7234024 | 16320 | 2.13 |
| | **Total** | **3989.2 5** | **40525.14** | | | | **79825500** | | **9591910** | **70233590** | | 1.82 |
| | Croppin g Intensity | 128.96 | | | Over All B:C | 1.82 | | | | | | |
| | Cultivab le Area (ha) | 5566.5 7 | | | | | | | | | | |
| | **Total Number of Farm Families in MWS** | **4790** | | | | | | | | | | |
| | Net Return per Househo ld | 14662. 54 | | | | | | | | | | |

**Present Outcome (Livestock)**

| Particulars | Cows | Buffaloes | Goat | Bullocks |
|---|---|---|---|---|
| Total Animals in Micro watershed Area | 2154 | 1227 | 7325 | 186 |
| Milking Animals | 1000 | 500 | 2500 | |
| Average Milk Production Lit. / day | 1580 | 1930 | 800 | |
| Average Milk Production /Animal/ day | 1.58 | 3.86 | 0.32 | |
| Sale of Milk per day (Rs) @ Rs 15/Lit | 23700 | 28950 | 12000 | |
| **Average 150 day milking days & Goat 90 days in a year (Total Rs)** | **3555000** | **4342500** | **1080000** | |
| Meat Animals | | | 2200 | |
| Average rate of one kids Rs | | | 3300 | |
| **Total Sale in a year Rs** | | | **7260000** | |
| Working Animals (Bullocks) | | | | 186 |
| One year work one agriculture fields 200 days @ 220/ day (One pair) | | | | 36000 |
| **Total Work value of all Draft animals** | | | | **3348000** |
| **Total monetary worth (Rs.)** | **3555000** | **4342500** | **8340000** | **3348000** |
| | | | | **19585500** |
| **Total Family** | | | | 4790 |
| **Total Income/Family** | | | | 4088.83 |
| Total Expenditure / family | | | | 2400 |
| **B:C Ratio** | | | | 1.7 |

**Projected Outcome (Livestock)**

| Particulars | Cows | Buffaloes | Goat | Bullocks |
|---|---|---|---|---|
| Total Animals in Micro watershed Area | 2500 | 1800 | 8500 | 250 |
| Milking Animals | 1300 | 850 | 3200 | |
| Average Milk Production Lit. / day | 2860 | 4590 | 1920 | |
| Average Milk Production /Animal/ day | 2.2 | 5.4 | 0.6 | |
| Sale of Milk per day (Rs) @ Rs 15/Lit | 42900 | 68850 | 28800 | |
| **Average 150 day milking days & Goat 90 days in a year (Total Rs)** | **6435000** | **10327500** | **2592000** | |
| Meat Animals | | | 4200 | |
| Average rate of one kids Rs | | | 2800 | |
| **Total Sale in a year Rs** | | | **11760000** | |
| Working Animals (Bullocks) | | | | 250 |
| One year work one agriculture fields 200 days @ 220/ day (One pair) | | | | 44000 |
| **Total Work value of all Draft animals** | | | | **5500000** |
| **Total monetary worth (Rs.)** | **6435000** | **10327500** | **14352000** | **5500000** |
| | | | | **36614500** |
| **Total Family** | | | | 4790 |
| **Total Income/Family** | | | | 7643.95 |
| Total Expenditure / family | | | | 3800 |
| **B:C Ratio** | | | | 2.01 |

**Table 7.4 : Outcomes & Benefit cost analysis of IWMP-XI, Banda**

| **Net Income / Family** | **Present** | **Projected** |
|---|---|---|
| Agriculture | 12442 | 14663 |
| Animal Husbandry | 4089 | 7644 |
| **Total (Ag+AH)** | **16531** | **22306** |
| **Over All B:C of MWS** | | |
| Agriculture | 1.57 | 1.82 |
| Animal Husbandry | 1.70 | 2.01 |
| Over All B: C MWS | **1.64** | **1.92** |

# CHAPTER - 8

## CONSOLIDATION AND WITHDRAWAL STRATEGY

**8. Consolidation and Withdrawal Strategy**

Success of any program depends on sustainability of the various watershed interventions and sustainability can only be achieved through active Success of any program depends on sustainability of the various watershed interventions and sustainability can only be achieved through active participation of community. Active participation and cooperation of community can be ensured by building their capacities through exposures and trainings. From the beginning emphasis will be on capacity building and empowerment of stakeholders. The Watershed Committee, SHGs, Area Groups, Users Group and other CBOs will be established, trained, and strengthened to continue development after withdrawal of PIA. By building economic activities through CBOs community participation will be sustained. The PR&D approach along with demand driven interventions will reduce dependency on subsidies. Contributions from the community will be ensured for the entire activities to develop sense of ownership and these contributions will be deposited to the account of Watershed Development Fund. Watershed Development Fund will also be strengthening through donations from the individual and institutions and the CBOs will be trained to run watershed as business model on sustainable basis. The tangible economic benefits along with empowerment and hand holding by PIA will empower the CBOs to develop and sustain the watershed activities after withdrawal of the PIA. Community organizations will withdraw the money from the WDF to maintain the asset created during the implementation phase. The consolidation phase will also include

- Writing of project completion report
- Documentation of success stories
- Making films, leaflets, bulletins and the lessons learnt.

  The expenditure will be done as per the Common Guidelines for Watershed Development Projects 2008.

  The completion report will reflect the development on following aspects:
- Productivity enhancement (increase in total productivity, seed replacement, farm mechanization, resources use and operational efficiency.
- Nutritional security (Production of diverse food commodities)
- Risk minimization (Integrated farming system, including diversification, water harvesting and protected cultivation, value addition and improved marketing)
- State of environment (Improvement in vegetative cover, hydrology and adoption of IPNM)
- Profitability (Loss preventing and cost reducing measures, value addition and agro-processing.)
- Livelihood security (skill enhancement capacity building, increased employment in agriculture and allied enterprises. Reduction in drudgery of farm women and out migration)

# CHAPTER - 9

## EXPECTED PROJECT OUTCOME

### 9.1 Employment Generation and Checking Migration

There had been very heavy migration from Bundelkhand region. During drought years, it is as high as 39% against an average migration rate of 11%, in other regions of Uttar Pradesh towards northern part of the country, specially the states of Delhi, Punjab and Haryana, as agriculture labors, factory workers, rickshaw pullers etc. The major reason attributed to high rate of migration is continuous drought in the region and absence of any other alternate livelihood opportunity, in spite of several anti-poverty programmes.

Due to watershed management the cropping intensity will be increased by around 20.00 per cent, in turn acreage in agricultural activities will be increased by about 745 ha. Therefore, an additional employment of about 74,500 human-days will be generated annually. Therefore, no migration in search of livelihoods is expected after implementation of watershed programme.

### 9.2 Other Expected Outcome*

The following tangible benefits are expected after implementation of the project:

- Runoff will be reduced by about 30 per cent, however soil and nutrient loss may be reduced up to 40 per cent from the watershed.
- Irrigation intensity may be increased to 40 per cent from present 3 per cent life saving irrigation.
- Surface water in nallah may be available for more than 8 months against 4-5 months at present.
- Average ground water recharge of about 2-4 m may be easily obtained after implementation of the programme
- Productivity of crops may be increased by about 15-25 per cent
- Significant saving of seeds may be obtained through crop demonstration with improved package of practices
- During implementation phase about 2,08,000 human-days will be created through the soil and water conservation measures and crop/agroforestry interventions.
- The overall B C ratio of the project is estimated to be 1.92 as compared to the 1.64 in pre project scenario (detailed analysis is given in Chapter 7)

***Above mentioned outcomes are based on the meta analysis of 636 watershed projects across India support by various govt. deptt. and development agencies throughout the country done by ICRISAT, Hyderabad and practical experience of watershed management in Bundelkhand region.**

**9.3 Questions to be answered**

This project will answer the following questions :

1. Will the measures taken for water harvesting sufficient enough to recharge the perched water table?
2. Will the soil and water conservation practices be helpful in combating drought?
3. Will alternate land use such as agroforestry land use system result in self reliance/prosperity in drought prone areas?
4. Can the strategies based on watershed basis yield fruitful results?
5. Response of the villagers towards the project and their participation in sustaining developed resources after withdrawal of the project?
6. Will the formation of SHGs will help in savings and generation of self employment?
7. Will the watershed programmes improve the socio-economic conditions of the stake holders?
8. Will the watershed programme helps in capacity building of the stake holders for dissemination of various activities of watershed programme?
9. Will it sustain after project withdrawal?

**9.4 Problems that could be solved as a results of this project/study**

Following problems can be tackled in the proposed watershed :

1. Solving the problems of shortage of fuel, fodder, fruit and small timber requirement of villagers.
2. Creating water resources for ground water recharge availability of surface water for animal drinking and nistar purposes.
3. Increasing fertilizer consumption and improving NPK consumption ratio.
4. Optimizing crop productivity by putting more area under HYV and irrigation.
5. Increasing cropping intensity.
6. Promoting dairying through increased fodder availability.
7. Improving basic amenities and facilities like health, education, drinking water etc.
8. Increasing per capita income and thereby standard of living of farming community.
9. Increasing co-operative membership.
10. Increasing self employment.
11. Improving living standard of society.

**ANNEXURE-I**

**BENEFICIARIES WISE DETAILS OF DEVELOPMENTAL ACTIVITIES**

**Village- Birkhera Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2c1c)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| PB1 | 8.57 | 306 | 350 | 4.20+0.60*1.20/2 | 2.88 | 1008 | 41.23 | 41559.84 | 346.332 | Bade Bhai etc. |
| PB2 | 6.12 | 391 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Bade Bhai etc. |
| PB3 | 4.9 | 453 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Shiv Nath etc. |
| PB4 | 4.9 | 457 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Shiv Nath etc. |
| PB5 | 6.12 | 831 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Ramgopal etc. |
| PB6 | 4.9 | 1469 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Bade Bhai etc. |
| PB7 | 6.12 | 1464 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Bade Bhai etc. |
| PB8 | 7.35 | 356 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.23 | 35622.72 | 296.856 | Shiv Nath etc. |
| PB9 | 6.12 | 522 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Ramgopal etc. |
| PB10 | 8.53 | 534 | 350 | 4.20+0.60*1.20/2 | 2.88 | 1008 | 41.23 | 41559.84 | 346.332 | Shiv Nath etc. |
| PB11 | 8.57 | 1022 | 350 | 4.20+0.60*1.20/2 | 2.88 | 1008 | 41.23 | 41559.84 | 346.332 | Ramgopal etc. |
| PB12 | 7.35 | 453 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.23 | 35622.72 | 296.856 | Shiv Nath etc. |
| PB13 | 7.35 | 598 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.23 | 35622.72 | 296.856 | Ramgopal etc. |
| PB14 | 4.9 | 2661 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Ramai Singh etc. |
| PB15 | 6.12 | 2736 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Mahaveer etc. |
| PB16 | 4.9 | 2703 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Chandrika etc. |
| PB17 | 6.12 | 2835/1 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Suresh etc. |
| PB18 | 4.9 | 2832 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Suresh etc. |
| PB19 | 10.1 | 3002 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.23 | 35622.72 | 296.856 | Suresh etc. |
| PB20 | 4.9 | 3179 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.48 | 197.904 | Suresh etc. |
| PB21 | 6.12 | 1265/1 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Devi Dayal etc. |
| **Total** | | | **5400** | | | **15552** | | **641208.96** | **5343.408** | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB1 | 4.02 | 81/1 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Keshav Kunvar etc. |
| SB2 | 4.02 | 80 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Keshav Kunvar etc. |
| SB3 | 4.02 | 73/1 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Binda etc. |
| SB4 | 6.7 | 5 | 250 | 4.35+0.75*1.20/2 | 3.06 | 765 | 41.23 | 31540.95 | 262.84125 | Binda etc. |
| SB5 | 4.02 | 15/2 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Swamideen etc. |
| SB6 | 6.7 | 13/3 | 250 | 4.35+0.75*1.20/2 | 3.06 | 765 | 41.23 | 31540.95 | 262.84125 | Swamideen etc. |
| SB7 | 4.02 | 656 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Shiv Narayan etc. |
| SB8 | 4.02 | 112/1 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Shiv Narayan etc. |
| SB9 | 8.04 | 55 | 300 | 4.35+0.75*1.20/2 | 3.06 | 918 | 41.23 | 37849.14 | 315.4095 | Ram Gopal etc. |
| SB10 | 5.36 | 132 | 200 | 4.35+0.75*1.20/2 | 3.06 | 612 | 41.23 | 25232.76 | 210.273 | Bade Bhai etc. |
| SB11 | 6.7 | 211 | 250 | 4.35+0.75*1.20/2 | 3.06 | 765 | 41.23 | 31540.95 | 262.84125 | Shiv Narayan etc. |
| SB12 | 4.02 | 627 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Ramai Singh etc. |
| SB13 | 4.02 | 642 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Shiv Narayan etc. |
| SB14 | 5.36 | 199 | 200 | 4.35+0.75*1.20/2 | 3.06 | 612 | 41.23 | 25232.76 | 210.273 | Shiv Narayan etc. |
| SB15 | 4.02 | 219 | 150 | 4.35+0.75*1.20/2 | 3.06 | 459 | 41.23 | 18924.57 | 157.70475 | Shiv Narayan etc. |
| SB16 | 6.7 | 610 | 250 | 4.35+0.75*1.20/2 | 3.06 | 765 | 41.23 | 31540.95 | 262.84125 | Shiv Nath etc. |
| SB17 | 5.36 | 304/1, 223, 224 | 200 | 4.35+0.75*1.20/2 | 3.06 | 612 | 41.23 | 25232.76 | 210.273 | Shiv Nath etc. |
| SB18 | 8.04 | 2498 to 2500, 1, 3 | 300 | 4.35+0.75*1.20/2 | 3.06 | 918 | 41.23 | 37849.14 | 315.4095 | Keshav Kunvar etc. |
| SB19 | 8.04 | 2498 to 2500, 1, 3 | 300 | 4.35+0.75*1.20/2 | 3.06 | 918 | 41.23 | 37849.14 | 315.4095 | Swamideen etc. |
| SB20 | 7.48 | 2561, 62, 45, 47 | 300 | 4.35+0.75*1.20/2 | 3.06 | 918 | 41.23 | 37849.14 | 315.4095 | Binda etc. |
| SB21 | 6.7 | 2551, 2552 | 250 | 4.35+0.75*1.20/2 | 3.06 | 765 | 41.23 | 31540.95 | 262.84125 | Shiv Narayan etc. |
| SB22 | 8.04 | 3056/1, 51, 43 | 300 | 4.35+0.75*1.20/2 | 3.06 | 918 | 41.23 | 37849.14 | 315.4095 | Binda etc. |

| **Total** | | | **4700** | | | **14382** | | **592969.86** | **4941.4155** | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD1 | 10.16 | 2730 to 33, 36, 45, 46 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Ram Kishor etc. |
| CD2 | 11.16 | 2713, 24 to28, 45 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | |
| CD3 | 11.16 | 2779, 80, 81, 89, 92, 23, 40, 53 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Bhagvati Prasad |
| CD4 | 12.76 | 2771 to 2775, 2227/1 | 80 | 14.00+2.00*2.20/2 | 17.6 | 1408 | 46.08 | 64880.64 | 540.672 | Bhagvati Prasad |
| CD5 | 12.76 | 2880, 79, 78, 81, 86, 88 | 80 | 14.00+2.00*2.20/2 | 17.6 | 1408 | 46.08 | 64880.64 | 540.672 | Hari Narayan etc. |
| CD6 | 11.16 | 2945, 46, 65, 66 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Hari Narayan etc. |
| CD7 | 11.16 | 2952, 54, 55, 49 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Bodi Singh |
| CD8 | 10.16 | 1885, 86, 8900, 92 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Raghuraj etc. |
| CD9 | 11.16 | 1860, 65, 71, 72 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Doli etc. |
| CD10 | 11.16 | 1827/1, 5, 25, 26 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Bhola etc. |
| CD11 | 11.16 | 1831/1, 1802/3, 182/3 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Harpal etc. |
| CD12 | 12.76 | 1270, 72, 74 | 80 | 14.00+2.00*2.20/2 | 17.6 | 1408 | 46.08 | 64880.64 | 540.672 | Harpal etc. |
| CD13 | 10.16 | 370, 71, 72 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Ram Kishor etc. |
| CD14 | 10.16 | 497 to 501, 471 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Bhagvati Prasad |
| CD15 | 10.16 | 803, 27, 26, 48, 88, 89 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Raghuraj etc. |
| CD16 | 10.16 | 808, 6, 7, 4, 25, 26 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Raghuraj etc. |
| CD17 | 10.16 | 1377, 76, 1594, 88, 89 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Shivraniya etc. |
| CD18 | 11.16 | 1386, 1428, 1573, 1377, 1380 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Boda etc. |
| CD19 | 11.16 | 1418/2, 20, 22, 1388/2, 1389/2 | 70 | 14.50+2.50*2.20/2 | 18.7 | 1309 | 46.08 | 60318.72 | 502.656 | Boda etc. |
| CD20 | 10.16 | 838, 1553, 839, 40, 41 | 60 | 14.50+2.50*2.20/2 | 18.7 | 1122 | 46.08 | 51701.76 | 430.848 | Shivraniya etc. |
| CD21 | 12.76 | 1739 to 1780 | 80 | 14.00+2.00*2.20/2 | 17.6 | 1408 | 46.08 | 64880.64 | 540.672 | Shivraniya etc. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD22 | 12.76 | 1270 | 80 | 14.00+2.00*2.20/2 | 17.6 | 1408 | 46.08 | 64880.64 | 540.672 | Jolav etc. |
| CD23 | 11.16 | 1795, 97, 98, 92 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Jolav etc. |
| CD24 | 10.32 | 1274, 1276/1 | 70 | 14.00+2.00*2.20/2 | 17.6 | 1232 | 46.08 | 56770.56 | 473.088 | Bhola etc. |
| **Total** | | | **1640** | | | **29535** | | **1360972.8** | **11341.44** | |
| WHB1 | 35 | 1272 | 90 | 17.50+2.50*2.80/2 | 28 | 2520 | 41.23 | 103899.6 | 865.83 | Ghaseeta etc. |
| WHB2 | 36 | 1270 | 90 | 17.50+2.50*2.80/2 | 28 | 2520 | 41.23 | 103899.6 | 865.83 | Ramadhar etc. |
| WHB3 | 37 | 1278 | 90 | 17.50+2.50*2.80/2 | 28 | 2520 | 41.23 | 103899.6 | 865.83 | Dulichandra etc. |
| | | | **270** | | | **7560** | | **311698.8** | **2597.49** | |

## Village- Terha Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2c1e)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| SB1 | 12.9 | 680, 681, 672/1, 677 | 500 | 4.20+0.60*1.20/2 | 2.88 | 1440 | 41.22 | 59356.8 | 494.64 | Shri Bhanu Pratap |
| SB2 | 10.1 | 685, 690/2, 683 | 400 | 4.20+0.60*1.20/2 | 2.88 | 1152 | 41.22 | 47485.4 | 395.712 | Shri Fool Chandra |
| **Total** | | | **900** | | | **2592** | | **106842** | **890.352** | |
| PB1 | 5.7 | 602, 597/2, 593/2 | 250 | 4.20+0.60*1.20/2 | 2.88 | 720 | 41.22 | 29678.4 | 247.32 | Shri Ganga Prasad |
| PB2 | 9.2 | 579, 580/2, 341 | 400 | 4.20+0.60*1.20/2 | 2.88 | 1152 | 41.22 | 47485.4 | 395.712 | Shri Daya Shankar |
| PB3 | 9.1 | 563, 570/2, 5531 | 400 | 4.20+0.60*1.20/2 | 2.88 | 1152 | 41.22 | 47485.4 | 395.712 | Shri Kaluva |
| **Total** | | | **1050** | | | **3024** | | **124649** | **1038.74** | |
| CD1 | 16.4 | 585, 595 | 80 | 12.40+2.00*2.60/2 | 18.72 | 1497.6 | 49.37 | 73936.5 | 616.138 | Shri Ganga Prasad |
| CD2 | 16.3 | 716, 715/1, 718/1 | 80 | 12.40+2.00*2.60/2 | 18.72 | 1497.6 | 49.37 | 73936.5 | 616.138 | Shri Daya Shankar |
| CD3 | 20.7 | 730/1, 748/1 | 80 | 13.00+2.00*2.80/2 | 21 | 1680 | 49.37 | 82941.6 | 691.18 | Shri Kaluva |
| **Total** | | | **240** | | | **4675.2** | | **230815** | **1923.46** | |
| WHB1 | 25.6 | 176/4, 2085 | 100 | 13.00+2.00*2.80/2 | 21 | 2100 | 51.08 | 107268 | 893.9 | Shri Ramlal |

## Village- Gadariya Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2c1d)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| SB1 | 14.25 | 1989, 1991, 2223/1, 2223/2 | 550 | 4.20+0.60*1.20/2 | 2.88 | 1584 | 41.22 | 65292.5 | 544.104 | Shri Devi Dayal |
| SB2 | 5.1 | 2200 | 200 | 4.20+0.60*1.20/2 | 2.88 | 576 | 41.22 | 23742.7 | 197.856 | Shri Gangva |
| SB3 | 7.7 | 2193, 2178/3 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.22 | 35614.1 | 296.784 | Shri Kamlesh Prasad |
| SB4 | 7.95 | 2160, 2162, 2163, 2167 | 300 | 4.20+0.60*1.20/2 | 2.88 | 864 | 41.22 | 35614.1 | 296.784 | Shri Lakhan Singh |
| **Total** | | | **1350** | | | **3888** | | **160263** | **1335.53** | |
| PB1 | 12.6 | 2139, 2140 | 200 | 5.20+0.60*1.40/2 | 4.06 | 812 | 39.16 | 31797.9 | 264.983 | Shri Shymaliya |
| PB2 | 12.1 | 2130, 2123, 2124 | 250 | 4.20+60*1.30/2 | 3.12 | 780 | 39.16 | 30544.8 | 254.54 | Shir Chunkan |
| PB3 | 9.7 | 2115 | 200 | 4.20+60*1.30/2 | 3.12 | 624 | 39.16 | 24435.8 | 203.632 | Shri Govind |
| PB4 | 8.9 | 2119 | 180 | 4.20+60*1.30/2 | 3.12 | 561.6 | 39.16 | 21992.3 | 183.269 | Shri Bacchi |
| PB5 | 9.7 | 2121 | 200 | 4.20+60*1.30/2 | 3.12 | 624 | 39.16 | 24435.8 | 203.632 | Shri Lakhan Singh |
| **Total** | | | **1030** | | | **3401.6** | | **133207** | **1110.06** | |
| CD1 | 13 | 2049, 2042 | 70 | 13.00+2.00*2.80/2 | 21 | 1470 | 51.08 | 75087.6 | 625.73 | Shri Ramsajeevan |
| CD2 | 13.1 | 1953, 1955 | 80 | 12.40+2.00*2.60/2 | 18.72 | 1497.6 | 49.37 | 73936.5 | 616.138 | Shri Bajrangi |
| CD3 | 15.4 | 2016, 2050 | 80 | 13+2*2.80/2 | 21 | 1680 | 51.08 | 85814.4 | 715.12 | Shri Gariba |
| CD4 | 15.5 | 1946, 1914 | 80 | 13+2*2.80/2 | 21 | 1680 | 51.08 | 85814.4 | 715.12 | Shri Gajraj |

**Village- Gauri Kalan Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2b2a)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| SB1 | | 564 | 1000 | | 2.88 | 2880 | 41.23 | 118742 | 989.52 | Foolchandra |
| SB2 | | 832 | 8.5 | | 2.88 | 24.48 | 41.23 | 1009.31 | 8.41092 | Sanjeev etc. |
| SB3 | | 1273 | 735 | | 2.88 | 2116.8 | 41.23 | 87275.7 | 727.297 | Shiv Kumar |
| **Total** | | | **1743.5** | | | **5021.28** | | **207027** | **1725.23** | |
| CD1 | | 840 | 100 | | 18 | 1800 | 47.96 | 86328 | 719.4 | Ram Vilas |
| CD2 | | 796 | 100 | | 18 | 1800 | 47.96 | 86328 | 719.4 | Barij Lal |
| CD3 | | 784 | 80 | | 20.5 | 1640 | 47.96 | 78654.4 | 655.453 | Suraj Prasad |
| CD4 | | 785 | 60 | | 18.5 | 1110 | 47.96 | 53235.6 | 443.63 | Hira Lal |
| CD5 | | 787 | 60 | | 18.5 | 1110 | 47.96 | 53235.6 | 443.63 | Kallu etc. |
| CD6 | | 795 | 60 | | 18 | 1080 | 47.96 | 51796.8 | 431.64 | Ghasva |
| CD7 | | 840 | 60 | | 18 | 1080 | 47.96 | 51796.8 | 431.64 | Ram Vikas |
| CD8 | | 795 | 100 | | 18 | 1800 | 47.96 | 86328 | 719.4 | Dashva |
| CD9 | | 1007 | 60 | | 18 | 1080 | 47.96 | 51796.8 | 431.64 | Ram Babu |
| CD10 | | 1269 | 80 | | 20.5 | 1640 | 47.96 | 78654.4 | 655.453 | Ramautar |
| CD11 | | 1259 | 60 | | 18.5 | 1110 | 47.96 | 53235.6 | 443.63 | Ramsewak |
| CD12 | | 1272 | 100 | | 18 | 1800 | 47.96 | 86328 | 719.4 | Jagdish Narayan |
| **Total** | | | **920** | | | **17050** | | **817718** | **6814.32** | |
| WHB1 | | 1254 | 120 | | 25.94 | 3112.8 | 49.37 | 153679 | 1280.66 | Ramcharan |
| WHB2 | | 795 | 120 | | 25.94 | 3112.8 | 49.37 | 153679 | 1280.66 | Ramasre |
| **Total** | | | **240** | | | **6225.6** | | **307358** | **2561.32** | |

## Village- Bhatha Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2a3h)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| SB1 | 22.6 | 201, 200, 224 | 1100 | 5.00+0.40*1.20/2 | 3.2 | 3520 | 41.23 | 145129.6 | 1209.413333 | Shri Deshraj Singh |
| SB2 | 13.2 | 227 to 231, 243, 249 | 700 | 4.60+0.40*1.20/2 | 3.2 | 2240 | 41.23 | 92355.2 | 769.6266667 | Shri Ramnath |
| **Total** | | | **1800** | | | **5760** | | **237484.8** | **1979.04** | |

## Village- Nadadev Block- Jaspura Tehsil- Banda, Distt. Banda

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB3 | 30.5 | 890 to 896 | 1350 | 4.60+0.40*1.20/2 | 3 | 4050 | 41.23 | 166981.5 | 1391.5125 | Shri Mahaveer |
| SB4 | 20.6 | 925, 938 to 943 | 800 | 4.60+0.40*1.20/2 | 3 | 2400 | 41.23 | 98952 | 824.6 | Shri Devi Lal |
| **Total** | | | **2150** | | | **6450** | | **265933.5** | **2216.1125** | |

## Village- Pailani Block- Jaspura Tehsil- Banda, Distt. Banda

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SB5 | 28.8 | 1510 to 1515 | 700 | 5.00+.40*1.30/2 | 3.5 | 2450 | 41.23 | 101013.5 | 841.7791667 |
| SB6 | 26.2 | 1402 to 1407 | 500 | 4.60+.40*1.20/2 | 3 | 1500 | 41.23 | 61845 | 515.375 |
| SB7 | 29.1 | 1323 to 1325, 1328 | 700 | 5.00+.40*1.30/2 | 3.5 | 2450 | 41.23 | 101013.5 | 841.7791667 |
| **Total** | | | **1900** | | | **6400** | | **263872** | **2198.933333** |
| CD8 | 19.3 | 1274, 1275, 1278 | 80 | 13.80+1.60*2.98/2 | 23 | 1840 | | | |
| | | | | | Dugg Well | 400 | 69.25 | 27700 | 230.8333333 |
| | | | | | Cleaning etc. | 1104 | 3.4 | 3753.6 | 31.28 |
| CD9 | 18.8 | 1384, 1385 | 40 | 14.00+1.80*2.53/2 | 20 | 800 | | | |
| | | | | | Dugg Well | 200 | 69.25 | 13850 | 115.4166667 |
| | | | | | Cleaning etc. | 560 | 3.4 | 1904 | 15.86666667 |
| CD10 | 30.6 | 1455, 1456 | 80 | 14.30+1.50*3.16/2 | 25 | 2000 | | | |
| | | | | | Dugg Well | 400 | 69.25 | 27700 | 230.8333333 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cleaning etc. | 560 | 3.4 | 1904 | 15.86666667 |
| CD11 | 25.4 | 1456, 1463, 1500 | 60 | 14.70+1.60*2.94/2 | 24 | 1440 | | | |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 |
| | | | | | Cleaning etc. | 882 | 3.4 | 2998.8 | 24.99 |

**Village- Jaspura Block- Jaspura Tehsil- Banda, Distt. Banda**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD1 | 18.4 | 2414, 2417 | 40 | 13.50+1.40*2.24/2 | 18 | 720 | | | |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 |
| | | | | | Cleaning etc. | 1350 | 3.4 | 4590 | 38.25 |
| CD2 | 23.2 | 2448, 2446 | 50 | 12.80+1.50*2.80/2 | 20 | 1000 | | | |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.3125 |
| | | | | | Cleaning etc. | 640 | 3.4 | 2176 | 18.13333333 |
| CD3 | 25.6 | 2450, 2444 | 60 | 13.50+1.60*2.61/2 | 20 | 1200 | | | |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 |
| | | | | | Cleaning etc. | 810 | 3.4 | 2754 | 22.95 |
| CD4 | 18.2 | 2485, 2486 | 50 | 12.80+1.50*2.80/2 | 20 | 1000 | | | |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.3125 |
| | | | | | Cleaning etc. | 640 | 3.4 | 2176 | 18.13333333 |
| CD5 | 18.2 | 2612, 2613 | 40 | 12.00+1.40*2.68/2 | 18 | 720 | | | |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 |
| | | | | | Cleaning etc. | 480 | 3.4 | 1632 | 13.6 |
| CD6 | 29.6 | 2580, 2581 | 50 | 12.00+1.40*2.98/2 | 20 | 1000 | | | |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.3125 |
| | | | | | Cleaning etc. | 600 | 3.4 | 2040 | 17 |
| CD7 | 18.9 | 2555, 2554 | 60 | 14.30+1.50*3.03/2 | 24 | 1440 | | | |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 |
| | | | | | Cleaning etc. | 858 | 3.4 | 2917.2 | 24.31 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHB1 | 77.2 | 2471, 2772 | 200 | 17.50+2.00*3.28/2 | 32 | 6400 | | | |
| | | | | | Dugg Well | 1000 | 69.75 | 69750 | 581.25 |
| | | | | | Cleaning etc. | 3500 | 3.4 | 11900 | 99.16666667 |

## Village- Madauli Khurd Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2n1b)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| PB1 | 2.48 | 385, 389 | 90 | 4.75+.100*1.25/2 | 3.6 | 324 | 39.16 | 12687.8 | 105.732 | Smt. Mithlesh |
| PB2 | 4.8 | 2508, 2510 | 180 | 4.75+.100*1.25/2 | 3.6 | 648 | 39.16 | 25375.7 | 211.464 | Ramgoapl |
| PB3 | 3.28 | 2489, 2490, 2496, 2498 | 120 | 4.75+.100*1.25/2 | 3.6 | 432 | 39.16 | 16917.1 | 140.976 | Ramadhaar, Shivadhaar |
| PB4 | 4.52 | 1628, 1629, 1635, 1637, 2546, 2550 | 170 | 4.75+.100*1.25/2 | 3.6 | 612 | 39.16 | 23965.9 | 199.716 | Badri |
| PB5 | 5.85 | 1568, 1653 to 1566 | 220 | 4.75+.100*1.25/2 | 3.6 | 792 | 39.16 | 31014.7 | 258.456 | Mannu Lal |
| PB6 | 5.8 | 1705, 1726 to 1730 | 220 | 4.75+.100*1.25/2 | 3.6 | 792 | 39.16 | 31014.7 | 258.456 | Chandrpal, Prahlad etc. |
| PB7 | 5.68 | 1365, 1366 | 210 | 4.75+.100*1.25/2 | 3.6 | 756 | 39.16 | 29605 | 246.708 | Sunil Kumar, Kubera etc. |
| PB8 | 6.65 | 1320 to 1322, 1324 to | 250 | 4.75+.100*1.25/2 | 3.6 | 900 | 39.16 | 35244 | 293.7 | Pratap Singh, Rajkaran |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1326 | | | | | | | | |
| PB9 | 7.28 | 1361 to 1366 | 270 | 4.75+.100*1.25/2 | 3.6 | 972 | 39.16 | 38063.5 | 317.196 | Bhaiyaden, Swamideen etc. |
| PB10 | 3.55 | 1370 to 1376 | 130 | 4.75+.100*1.25/2 | 3.6 | 468 | 39.16 | 18326.9 | 152.724 | Ballu, Deviya etc. |
| PB11 | 4.78 | 1389, 1391, 1393, 1418, 1420 | 180 | 4.75+.100*1.25/2 | 3.6 | 648 | 39.16 | 25375.7 | 211.464 | Ram Gopal, Jagroop Singh etc. |
| PB12 | 5.38 | 1153, 1175, 1158 to 1160 | 200 | 4.75+.100*1.25/2 | 3.6 | 720 | 39.16 | 28195.2 | 234.96 | Ramaiya, Maheshwari etc. |
| PB13 | 3.72 | 1161 to 1163, 1155, 1158 | 140 | 4.75+.100*1.25/2 | 3.6 | 504 | 39.16 | 19736.6 | 164.472 | Vanshgopal etc. |
| PB14 | 5.58 | 1165 to 1168, 1171, 1174, 1175 | 210 | 4.75+.100*1.25/2 | 3.6 | 756 | 39.16 | 29605 | 246.708 | Ramsewak, Arjun, Ramaiya etc. |
| PB15 | 5.6 | 1132 to 1134, 1188 to 1190 | 210 | 4.75+.100*1.25/2 | 3.6 | 756 | 39.16 | 29605 | 246.708 | Ram Vishal, Mirkhoo |
| PB16 | 4.52 | 1219, 1221, 1222 | 170 | 4.75+.100*1.25/2 | 3.6 | 612 | 39.16 | 23965.9 | 199.716 | Matadeen |
| PB17 | 5.85 | 1371, 1394, 1395 | 220 | 4.75+.100*1.25/2 | 3.6 | 792 | 39.16 | 31014.7 | 258.456 | Shri Krishn Jaikaran, etc. |
| PB18 | 9.36 | 1692 to 1695, 1688, | 350 | 4.75+.100*1.25/2 | 3.6 | 1260 | 39.16 | 49341.6 | 411.18 | Smt. Kalli, Ram moorat etc. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1760 to 1763, 1699, 1690 | | | | | | | | |
| PB19 | 6.86 | 2549 to 2552, 2557 | 280 | 4.75+.100*1.25/2 | 3.6 | 1008 | 39.16 | 39473.3 | 328.944 | Manna, Kaluva, Devideen etc. |
| PB20 | 6.15 | 2080, 2082, 2089 | 230 | 4.75+.100*1.25/2 | 3.6 | 828 | 39.16 | 32424.5 | 270.204 | Ramadhaar, Shivadhaar |
| **Total** | | | **4050** | | | **14580** | | **570953** | **4757.94** | |
| SB1 | 1.8 | 283, 291, 296 | 100 | 4.20+60*1.20/2 | 2.88 | 288 | 41.23 | 11874.2 | 98.952 | Jagroop Singh |
| CD1 | 6.7 | 387, 389, 390, 392, 393 | 30 | | 14.65 | 439.5 | | | | Jamuniya, Ramratan Singh etc. |
| | | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | | Cleaning etc. | 324.9 | 3.4 | 1104.66 | 9.2055 | |
| CD2 | 6.68 | 385, 393 to 395 | 30 | | 14.65 | 439.5 | | | | Jamuniya, Ramratan Singh etc. |
| | | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | | Cleaning etc. | 324.9 | 3.4 | 1104.66 | 9.2055 | |
| CD3 | 5.69 | 399, 400, 402, 403, 405 | 30 | | 14.65 | 439.5 | | | | Jaggu |
| | | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | | Cleaning etc. | 324.9 | 3.4 | 1104.66 | 9.2055 | |
| CD4 | 8 | 401, 4014, 505, 507, 410, 411 | 40 | | 14.28 | 571.2 | | | | Bhaiyadeen, Bhoora |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 390 | 3.4 | 1326 | 11.05 | |
| CD5 | 7.09 | 367, 383, 405, 408, 409 | 40 | | 14.28 | 571.2 | | | | Lallu, Udit Narayan, etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 390 | 3.4 | 1326 | 11.05 | |
| CD6 | 8.18 | 282, 283, 285, 277, 313 | 40 | | 14.28 | 571.2 | | | | Babu Lal |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 390 | 3.4 | 1326 | 11.05 | |
| CD7 | 7.5 | 368, 369, 377 to 381 | 40 | | 14.65 | 586 | | | | Lallu, Shivram, Baccha etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 433.2 | 3.4 | 1472.88 | 12.274 | |
| CD8 | 8.59 | 438 to 442, 369, 373, 376 | 40 | | 14.65 | 586 | | | | Natthu, Lallu @ Shivram |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 433.2 | 3.4 | 1472.88 | 12.274 | |
| CD9 | 9.97 | 1747, 1764 to 1767 | 50 | | 15.58 | 779 | | | | Hardayal Pratap, Ratifal etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| CD10 | 10.49 | 2513, 2515 | 50 | | 14.65 | 732.5 | | | | Bhoora, Shiv etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Cleaning etc. | 541.5 | 3.4 | 1841.1 | 15.3425 | |
| CD11 | 9.09 | 2531, 2541, 2557 to 2561 | 40 | | 14.28 | 571.2 | | | | Dev Pratap, Devideen etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 390 | 3.4 | 1326 | 11.05 | |
| CD12 | 10.04 | 2531 to 2533, 2536, 2543, 2541 to 2542 | 50 | | 15.58 | 779 | | | | Babu, Shivram etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| CD13 | 10.47 | 253, 2544 | 50 | | 15.58 | 779 | | | | Shivram, Kuldeep Singh etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| CD14 | 10.35 | 689 to 692, 1740, 1747 to 1754 | 50 | | 16.07 | 803.5 | | | | Kunvar Bahadur, Rmabhavan etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD15 | 10.4 | 687 to 689, 695 to 697, 1737 | 50 | | 14.65 | 732.5 | | | | Shiv Lal, Bacchi, Prahlad etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 541.5 | 3.4 | 1841.1 | 15.3425 | |
| CD16 | 11.3 | 2524, | 50 | | 16.07 | 803.5 | | | | Sukhnandan, Jagroop |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2495 | | | | | | | | |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD17 | 13 | 2522, 2529 | 60 | | 15.58 | 934.8 | | | | Sabhajeet, Samarjeet |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | | Cleaning etc. | 580.8 | 3.4 | 1974.72 | 16.456 | |
| CD18 | 12.42 | 2520, 2529 | 60 | | 16.07 | 964.2 | | | | Killi, Sabhajeet, Samarjeet |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | | Cleaning etc. | 636.6 | 3.4 | 2164.44 | 18.037 | |
| CD19 | 10 | 1396, 1397 | 40 | | 15.58 | 623.2 | | | | Ramgopal, Vardani etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 387.2 | 3.4 | 1316.48 | 10.9707 | |
| CD20 | 11.36 | 1184, 1371 | 40 | | 15.58 | 623.2 | | | | Shivkaran, Hira Lal, Ballu etc. |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 387.2 | 3.4 | 1316.48 | 10.9707 | |
| CD21 | 11.58 | 1184, 1371 | 50 | | 16.07 | 803.5 | | | | Shivkaran, Hira Lal, Ballu etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD22 | 10.58 | 1191, 1362 | 50 | | 14.65 | 732.5 | | | | Bacchi, Bhiya Lal etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 541.5 | 3.4 | 1841.1 | 15.3425 | |
| CD23 | 10.45 | 1193, 1361 | 50 | | 14.65 | 732.5 | | | | Swamideen, Arjun, Bhiyadeen etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 541.5 | 3.4 | 1841.1 | 15.3425 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD24 | 10.95 | 1211, 1352, 1357 | 50 | | 15.58 | 779 | | | | Jaswant, Rajpal, Virendra Singh |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| CD25 | 13.4 | 2518, 2530 | 60 | | 16.07 | 964.2 | | | | Gyan Babu, Ram Kumari |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | | Cleaning etc. | 636.6 | 3.4 | 2164.44 | 18.037 | |
| CD26 | 12.9 | 1344, 1211, 1147 | 60 | | 15.58 | 934.8 | | | | Akbar Singh, Jaswant, Vijay etc. |
| | | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | | Cleaning etc. | 580.8 | 3.4 | 1974.72 | 16.456 | |
| CD27 | 11.4 | 1209 to 1213 | 50 | | 16.07 | 803.5 | | | | Jaswant, Savitri |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD28 | 11.35 | 1341, 1220 | 50 | | 16.07 | 803.5 | | | | Brij Kishor, Ramnaresh, Kallu etc. |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD29 | 13.05 | 2534, 1794 | 50 | | 15.58 | 779 | | | | Shivram, Ramvishal |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| CD30 | 12.3 | 1662, 1669 | 50 | | 16.07 | 803.5 | | | | Avadh Bihari, Chunbaad |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 530.5 | 3.4 | 1803.7 | 15.0308 | |
| CD31 | 13.15 | 1555, 1701 | 50 | | 15.58 | 779 | | | | Pratap Singh |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 484 | 3.4 | 1645.6 | 13.7133 | |
| WHB1 | 15.88 | 1648, 1659 | 40 | | 23.13 | 925.2 | | | | Raghuraj, Shiv Lal |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 510.4 | 3.4 | 1735.36 | 14.4613 | |
| WHB2 | 15.27 | 1640, 1643 | 40 | | 22.24 | 889.6 | | | | Baccha, Krishn Bihari |
| | | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | | Cleaning etc. | 491.2 | 3.4 | 1670.08 | 13.9173 | |
| WHB3 | 18.77 | 1561, 1701 | 50 | | 22.18 | 1109 | | | | Pratap Singh |
| | | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | | Cleaning etc. | 605.5 | 3.4 | 2058.7 | 17.1558 | |
| WHB4 | 26.72 | 1560, 1565 | 50 | | 31.38 | 1569 | | | | Ramgopal etc. |
| | | | | | Dugg Well | 240 | 69.75 | 16740 | 139.5 | |
| | | | | | Cleaning etc. | 740 | 3.4 | 2516 | 20.9667 | |

## Village- Jaspura Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2b1b)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| PB1 | 5.63 | 1531, 1541 to 1549 | 300 | 4.20+.60*1.20/2 | 2.88 | 864 | 39.16 | 33834.2 | 281.952 | Cheda Singh, Dharmendra, Ram Kumar etc. |
| PB2 | 2.25 | 1684, 1695 | 120 | 4.20+.60*1.20/2 | 2.88 | 345.6 | 39.16 | 13533.7 | 112.781 | Ram Kumar etc. |
| PB3 | 4.14 | 1934 to 1937, 1880 to 1883 | 220 | 4.20+.60*1.20/2 | 2.88 | 633.6 | 39.16 | 24811.8 | 206.765 | Babu, Jhandu, Dhaniram etc. |
| **Total** | | | **640** | | | **1843.2** | | **72179.7** | **601.498** | |

**Village- Gauri Kalan**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PB4 | 4.52 | 910, 911, 943 | 240 | 4.20+.60*1.20/2 | 2.88 | 691.2 | 39.16 | 27067.4 | 225.562 | Shivram Singh, Anuruddh Singh etc. |
| PB5 | 4.7 | 2317 to 2319 | 250 | 4.20+.60*1.20/2 | 2.88 | 720 | 39.16 | 28195.2 | 234.96 | Deen Dayal, Bhola, Ramcharan etc. |
| PB6 | 3 | 2357 | 160 | 4.20+.60*1.20/2 | 2.88 | 460.8 | 39.16 | 18044.9 | 150.374 | Bhagvali, Babu Lal, Ravikaran etc. |
| PB7 | 5.64 | 2369, 2410 | 300 | 4.20+.60*1.20/2 | 2.88 | 864 | 39.16 | 33834.2 | 281.952 | Shiv Nandan, Ravi Karan, Ram Jiyawan etc. |
| **Total** | | | **950** | | | **2736** | | **107142** | **892.848** | |

**Village- Jaspura**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB1 | 3.06 | 1680, 1681 | 160 | 4.20+.60*1.20/2 | 2.88 | 460.8 | 41.23 | 18998.8 | 158.323 | Ram Vishal, Yogesh, Ramsnhei etc. |
| SB2 | 8 | 1926, 1927, 1932 | 350 | 4.60+.70*1.30/2 | 3.44 | 1204 | 41.23 | 49640.9 | 413.674 | Barjesh Singh, Shatrughan Singh etc. |
| SB3 | 8.04 | 1963, 1961, 1958 to 1959 | 350 | 4.60+.70*1.30/2 | 3.44 | 1204 | 41.23 | 49640.9 | 413.674 | Lallu, Smt. Budhiya etc. |
| SB4 | 6.38 | 1964, 1976 | 280 | 4.60+.70*1.30/2 | 3.44 | 963.2 | 41.23 | 39712.7 | 330.939 | Shiv Balak, Bhoora Singh etc. |
| SB5 | 3.83 | 1722 | 200 | 4.20+.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.5 | 197.904 | Smt. Hiramani |
| SB6 | 4.21 | 1721 | 220 | 4.20+.60*1.20/2 | 2.88 | 633.6 | 41.23 | 26123.3 | 217.694 | Bijaula Singh, Buddhu Singh |
| **Total** | | | | | | **5041.6** | | **207865** | **1732.21** | |

**Village- Gauri Kalan**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB7 | 7.66 | 922, 923, 9258 | 400 | 4.20+.60*1.20/2 | 2.88 | 1152 | 41.23 | 47497 | 395.808 | Rampal, Shripal, etc. |
| SB8 | 3.82 | 1391 | 200 | 4.20+.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.5 | 197.904 | Santosh Kumar |
| SB9 | 3.85 | 1405, 1406 | 200 | 4.20+.60*1.20/2 | 2.88 | 576 | 41.23 | 23748.5 | 197.904 | Raghuveer, Santosh Kumar etc. |
| SB10 | 4.78 | 1430 to 1432, 1428 | 250 | 4.20+.60*1.20/2 | 2.88 | 720 | 41.23 | 29685.6 | 247.38 | Jagroop Singh, Raj Kishor, Indrpal etc. |
| **Total** | | | **1050** | | | **3024** | | **124680** | **1039** | |

**Village- Jaspura**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD1 | 4.98 | 1631, 1653 | 40 | 13.32 | 532.8 | 46.08 | 24551.4 | 204.595 | Shiv Prasad, Gaya Prasad etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 338.4 | 3.4 | 1150.56 | 9.588 | |
| CD2 | 5.02 | 1626, 1655 | 40 | 13.32 | 532.8 | 46.08 | 24551.4 | 204.595 | Vikramaditya Singh etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 338.4 | 3.4 | 1150.56 | 9.588 | |
| CD3 | 4.86 | 1589, 1592 | 40 | 12.92 | 516.8 | 46.08 | 23814.1 | 198.451 | Muluva, Baccha, Shivcharan etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 344.8 | 3.4 | 1172.32 | 9.76933 | |
| CD4 | 15.4 | 1669, 1579 | 120 | 13.64 | 1636.8 | 46.08 | 75423.7 | 628.531 | Jaipal, Shivkaran, Lakhan Singh etc. |
| | | | | Dugg Well | 600 | 69.75 | 41850 | 348.75 | |
| | | | | Cleaning etc. | 1146 | 3.4 | 3896.4 | 32.47 | |
| CD5 | 4.92 | 1673, 1696 | 40 | 12.92 | 516.8 | 46.08 | 23814.1 | 198.451 | Lakhan Singh, Jhuriya etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 344.8 | 3.4 | 1172.32 | 9.76933 | |
| CD6 | 7.69 | 1709 to 1718, 1573 to 1583 | 60 | 13.61 | 816.6 | 46.08 | 37628.9 | 313.574 | Siddh Gopal, Gangadeen, Jhuriya etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | Cleaning etc. | 548.4 | 3.4 | 1864.56 | 15.538 | |
| CD7 | 1.75 | 1978, 1998 | 20 | 9.52 | 190.4 | 44.34 | 8442.34 | 70.3528 | Shivlal, Ramcharan etc. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Dugg Well | 100 | 69.75 | 6975 | 58.125 | |
| | | | | Cleaning etc. | 145.2 | 3.4 | 493.68 | 4.114 | |
| CD8 | 3.79 | 1969 to 1974 | 30 | 13.37 | 401.1 | 46.08 | 18482.7 | 154.022 | Jhandu, Shiv Prasad, Dhaniram etc. |
| | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | Cleaning etc. | 264.3 | 3.4 | 898.62 | 7.4885 | |
| CD9 | 5.3 | 1924, 1925, 1981 | 45 | 12.72 | 572.4 | 46.08 | 26376.2 | 219.802 | Kuber, Babu Singh, Dhaniram etc. |
| | | | | Dugg Well | 225 | 69.75 | 15693.8 | 130.781 | |
| | | | | Cleaning etc. | 387.9 | 3.4 | 1318.86 | 10.9905 | |
| CD10 | 5.48 | 1914 to 1922, 1924 | 45 | 12.72 | 572.4 | 46.08 | 26376.2 | 219.802 | Kuber, Babu Singh, Dhaniram etc. |
| | | | | Dugg Well | 225 | 69.75 | 15693.8 | 130.781 | |
| | | | | Cleaning etc. | 387.9 | 3.4 | 1318.86 | 10.9905 | |
| CD11 | 5.88 | 1908 to 1912, 1923 | 50 | 12.47 | 623.5 | 46.08 | 28730.9 | 239.424 | Jaipal, Kuber etc. |
| | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | Cleaning etc. | 441.5 | 3.4 | 1501.1 | 12.5092 | |
| CD12 | 15.8 | 1990 to 2002, 2018, 2019, 2023 | 90 | 17.52 | 1576.8 | 49.37 | 77846.6 | 648.722 | Cheduva etc. |
| | | | | Dugg Well | 450 | 69.75 | 31387.5 | 261.563 | |
| | | | | Cleaning etc. | 972.9 | 3.4 | 3307.86 | 27.5655 | |
| CD13 | 9.38 | 2020, 2023, 2024, 2079 to 2081 | 50 | 19.3 | 965 | 47.96 | 46281.4 | 385.678 | Shatrughan Singh, Chedua etc. |
| | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | Cleaning etc. | 564 | 3.4 | 1917.6 | 15.98 | |
| CD14 | 15.65 | 2028 to 2042 | 80 | 19.59 | 1567.2 | 49.37 | 77372.7 | 644.772 | Bhoora Singh, Sundarva etc. |
| | | | | Dugg Well | 400 | 69.75 | 27900 | 232.5 | |
| | | | | Cleaning etc. | 892.8 | 3.4 | 3035.52 | 25.296 | |
| CD15 | 7.36 | 2026, 2027 | 65 | 12 | 780 | 46.08 | 35942.4 | 299.52 | Bhoora, Durga, Balveer, etc. |
| | | | | Dugg Well | 325 | 69.75 | 22668.8 | 188.906 | |
| | | | | Cleaning etc. | 549.25 | 3.4 | 1867.45 | 15.5621 | |
| CD16 | 7.5 | 2027, 2031 | 60 | 13.25 | 795 | 46.08 | 36633.6 | 305.28 | Tedva, Naraina, Chote Lal etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cleaning etc. | 534.6 | 3.4 | 1817.64 | 15.147 | |
| CD17 | 7.34 | 2024, 2027 | 60 | 12.99 | 779.4 | 46.08 | 35914.8 | 299.29 | Sajeevan, Shiv Balak, Tedva etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | Cleaning etc. | 532.8 | 3.4 | 1811.52 | 15.096 | |

**Village- Gauri Kalan**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD18 | 5.75 | 1391, 1395 to 1397, 1400 | 30 | 13.37 | 401.1 | 46.08 | 18482.7 | 154.022 | Santosh Kumar |
| | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | Cleaning etc. | 264.3 | 3.4 | 898.62 | 7.4885 | |
| CD19 | 6.18 | 1391 to 1393, 1398, 1399 | 35 | 12.3 | 430.5 | 46.08 | 19837.4 | 165.312 | Lakhan Singh |
| | | | | Dugg Well | 175 | 69.75 | 12206.3 | 101.719 | |
| | | | | Cleaning etc. | 286.3 | 3.4 | 973.42 | 8.11183 | |
| CD20 | 7.45 | 1438, 1439, 1441 to 1444, 2192 | 40 | 12.92 | 516.8 | 46.08 | 23814.1 | 198.451 | Kallu, Prahlad, Kedar etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 344.8 | 3.4 | 1172.32 | 9.76933 | |
| CD21 | 11.7 | 2323 to 2326 | 60 | 13.61 | 816.6 | 46.08 | 37628.9 | 313.574 | Soniya, Ganga Prasad, Raghunandan etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | Cleaning etc. | 548.4 | 3.4 | 1864.56 | 15.538 | |
| CD22 | 10.35 | 2314, 2319 | 50 | 14.49 | 724.5 | 46.08 | 33385 | 278.208 | Mukul, Punna, Jageshwar etc. |
| | | 2323, 2326 | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | Cleaning etc. | 455 | 3.4 | 1547 | 12.8917 | |
| CD23 | 7.65 | 2309, 2310, 2351, | 40 | 13.32 | 532.8 | 46.08 | 24551.4 | 204.595 | Swamideen, Shiv Nandan, Durga etc. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2353, 2381 | | | | | | | |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 338.4 | 3.4 | 1150.56 | 9.588 | |
| CD24 | 7.65 | 2311, 2347, 2348, 2351 | 40 | 15.58 | 623.2 | 43.96 | 27395.9 | 228.299 | Swamideen, Shiv Nandan, Durga etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 387.6 | 3.4 | 1317.84 | 10.982 | |
| CD25 | 7.65 | 2351 | 40 | 13.32 | 532.8 | 46.08 | 24551.4 | 204.595 | Swamideen, Shiv Nandan, Durga etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 338.4 | 3.4 | 1150.56 | 9.588 | |
| CD26 | 7.51 | 2301, 2357, 2377, 2379 | 30 | 17 | 510 | 47.96 | 24459.6 | 203.83 | Bhagvati, Babu Lal, Cheduva etc. |
| | | | | Dugg Well | 150 | 69.75 | 10462.5 | 87.1875 | |
| | | | | Cleaning etc. | 316.5 | 3.4 | 1076.1 | 8.9675 | |
| CD27 | 9.3 | 2357, 2358, 2297 to 2299 | 40 | 15.58 | 623.2 | 47.96 | 29888.7 | 249.072 | Bhagvati etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 387.6 | 3.4 | 1317.84 | 10.982 | |
| CD28 | 9.25 | 2361, 2362 | 35 | 17.22 | 602.7 | 49.37 | 29755.3 | 247.961 | Shiv Nandan, Shiv Narayan etc. |
| | | | | Dugg Well | 175 | 69.75 | 12206.3 | 101.719 | |
| | | | | Cleaning etc. | 409.85 | 3.4 | 1393.49 | 11.6124 | |
| CD29 | 8.5 | 2366, 2368 | 51 | 12.27 | 625.77 | 46.08 | 28835.5 | 240.296 | Ganesh Prasad, Shiv Nandan etc. |
| | | | | Dugg Well | 255 | 69.75 | 17786.3 | 148.219 | |
| | | | | Cleaning etc. | 450.33 | 3.4 | 1531.12 | 12.7594 | |
| CD30 | 8.55 | 2406, 2411, 2412 to 2416 | 35 | 14.65 | 512.75 | 47.96 | 24591.5 | 204.929 | Ganesh Prasad etc. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Dugg Well | 175 | 69.75 | 12206.3 | 101.719 | |
| | | | | Cleaning etc. | 379.05 | 3.4 | 1288.77 | 10.7398 | |
| CD31 | 9.25 | 2401 to 2405, 2357, 2378 | 40 | 15.58 | 623.2 | 47.96 | 29888.7 | 249.072 | Ravikaran etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 387.6 | 3.4 | 1317.84 | 10.982 | |
| CD32 | 7.65 | 2411, 2412, 2417, 2418, 2380 | 40 | 13.32 | 532.8 | 46.08 | 24551.4 | 204.595 | Maheshura, Bharat, Ravikaran etc. |
| | | | | Dugg Well | 200 | 69.75 | 13950 | 116.25 | |
| | | | | Cleaning etc. | 338.4 | 3.4 | 1150.56 | 9.588 | |
| CD33 | 10.34 | 2400, 2401, 2381 to 2383 | 50 | 14.49 | 724.5 | 46.08 | 33385 | 278.208 | Bharat etc. |
| | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | Cleaning etc. | 455 | 3.4 | 1547 | 12.8917 | |
| CD34 | 14.26 | 2393, 2400 | 50 | 19.3 | 965 | 47.96 | 46281.4 | 385.678 | Matadeen etc. |
| | | | | Dugg Well | 250 | 69.75 | 17437.5 | 145.313 | |
| | | | | Cleaning etc. | 564 | 3.4 | 1917.6 | 15.98 | |

**Village- Jaspura**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHB1 | 29.72 | 1703, 1704 | 120 | 23.13 | 2775.6 | 51.08 | 141778 | 1181.48 | Narayan, Gangacharan etc. |
| | | | | Dugg Well | 600 | 69.75 | 41850 | 348.75 | |
| | | | | Cleaning etc. | 1531.2 | 3.4 | 5206.08 | 43.384 | |
| WHB2 | 26.19 | 1702, 1703, 1706, 1689, 1698, 1955 to 1957 | 110 | 22.24 | 2446.4 | 51.08 | 124962 | 1041.35 | Jhuriya, Shivkochan et c. |
| | | | | Dugg Well | 550 | 69.75 | 38362.5 | 319.688 | |
| | | | | Cleaning etc. | 1350.8 | 3.4 | 4592.72 | 38.2727 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHB3 | 13.8 | 1692, 1698 | 60 | 22.18 | 1330.8 | 49.37 | 65701.6 | 547.513 | Baccha Singh, Gajodhar, Puniya etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | Cleaning etc. | 726.6 | 3.4 | 2470.44 | 20.587 | |
| WHB4 | 32.65 | 1707, 1686, 1688, 1689 | 140 | 21.76 | 3046.4 | 51.08 | 155610 | 1296.75 | Surajdeen, Jhuriya, Baccha Singh etc. |
| | | | | Dugg Well | 700 | 69.75 | 48825 | 406.875 | |
| | | | | Cleaning etc. | 1733.2 | 3.4 | 5892.88 | 49.1073 | |

**Village- Gauri Kalan**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHB5 | 25.58 | 2257 | 60 | 22.18 | 1330.8 | 49.37 | 65701.6 | 547.513 | Shivdas, Sattideen, Babbu, Suraj Bali etc. |
| | | | | Dugg Well | 300 | 69.75 | 20925 | 174.375 | |
| | | | | Cleaning etc. | 726.6 | 3.4 | 2470.44 | 20.587 | |
| WHB6 | 27.1 | 2222, 2225 | 75 | 18.29 | 1371.75 | 51.08 | 70069 | 583.908 | Santram, Maikoo, Ramsewak etc. |
| | | | | Dugg Well | 375 | 69.75 | 26156.3 | 217.969 | |
| | | | | Cleaning etc. | 924.67 | 3.4 | 3143.88 | 26.199 | |
| WHB7 | 38.76 | 2423 to 2430 | 140 | 21.76 | 3046.4 | 51.08 | 155610 | 1296.75 | Ganesh Prasad etc. |
| | | | | Dugg Well | 700 | 69.75 | 48825 | 406.875 | |
| | | | | Cleaning etc. | 1733.2 | 3.4 | 5892.88 | 49.1073 | |

## Village- Narjita Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2b3a)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| SB1 | 8 | 458 to 461 | 200 | 3.50+.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Shivcharan |
| SB2 | 10 | 536 to 538, 556, 527, 528, 524 | 200 | 3.50+.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Devi Dayal |
| SB3 | 10 | 579, 572, 573, 574 | 200 | 3.50+.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Pilla |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB4 | 8 | 559 to 562, 569 | 200 | 3.50+.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Ghasita |
| | | | | | | | | | | |
| CD1 | 18 | 316 to 320, 321 to 320 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Laxmikant |
| CD2 | 26 | 446, 447, 439, 423, 417, 471, 470 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Bhagvandeen |
| CD3 | 22 | 440, 445, 450, 445 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Laxmikant |
| CD4 | 18 | 306, 308, 307, 310 | 40 | 10.66+2.00*2.3/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Laxmikant |

**Village- Bahundri**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB5 | 3 | 8, 5, 6, 7 | 200 | 3.50+.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Bhagvandeen |
| CD26 | 8 | 9, 10, 12, 2, 3, 4 | 40 | 10.66+2.00*2.3/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | |
| CD27 | 8 | 13, 16, 17, 18 | 40 | 10.66+2.00*2.3/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | |
| CD28 | 5 | 14, 237, 238, 239 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | |
| CD29 | 5 | 237, 234, 235, 233, 232 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | |

**Village- Sikuva**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PB1 | 4 | 321, 29 | 200 | 4.00+1.00*1.00/2 | 2.5 | 500 | 39.11 | 19555 | 162.958 | Bhagvandeen |
| PB2 | 4 | 86 | 200 | 4.00+1.00*1.00/2 | 2.5 | 500 | 39.11 | 19555 | 162.958 | Kallu Khan |
| PB3 | 4 | 102 | 200 | 4.00+1.00*1.00/2 | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| PB4 | 4 | 101 | 200 | 4.00+1.00*1.00/2 | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| PB5 | 4 | 58 | 200 | 4.00+1.00*1.00/2 | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| | | | | | | | | | | |
| CD5 | 20 | 22, 23 | 40 | 9.64+1.60*2.10/2 | 11.8 | 472 | 46.07 | 21745 | 181.209 | |
| CD6 | 10 | 23, 24, 322 | 40 | 10.00+2.009*2.30/2 | 19.56 | 782.4 | 46.07 | 36045.2 | 300.376 | Bhagvandeen |
| CD7 | 4 | 23, 24, 322, 283, 284, 285, | 40 | 10.00+2.009*2.30/2 | 19.56 | 782.4 | 46.07 | 36045.2 | 300.376 | Pooran Singh |
| CD8 | 4 | 274, 288, 293, 294, 273 | 50 | 9.64+1.60*2.10/2 | 11.8 | 590 | 46.07 | 27181.3 | 226.511 | Ramswaroop |
| CD9 | 12 | 14, 15, 16, 17, 18, 19, 20 | 50 | 10.00+2.009*2.30/2 | 19.56 | 978 | 46.07 | 45056.5 | 375.471 | Natthu |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD10 | 4 | 70, 58 | 40 | 9.33+2.00*2.15/2 | 12.18 | 487.2 | 46.07 | 22445.3 | 187.044 | |
| CD11 | 4 | 70 | 40 | 9.33+2.00*2.15/2 | 12.18 | 487.2 | 46.07 | 22445.3 | 187.044 | |
| CD12 | 14 | 67, 68, 70, 86 | 50 | 9.64+1.60*2.10/2 | 11.8 | 590 | 46.07 | 27181.3 | 226.511 | |
| CD13 | 10 | 83, 86 | 40 | 9.64+1.60*2.10/2 | 11.8 | 472 | 46.07 | 21745 | 181.209 | |
| CD14 | 15 | 70, 83 | 40 | 10.66+2.00*2.3/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | |
| CD15 | 5 | 83 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Rahmaan Khan |
| CD16 | 5 | 83 | 50 | 10.66+2.00*2.3/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Rahmaan Khan |
| CD17 | 10 | 83 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Hanif Khan |
| CD18 | 10 | 83, 103 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Jagdev |
| CD19 | 15 | 103 | 50 | 15.94+2.00*2.48/2 | 22.25 | 1112.5 | 46.07 | 51252.9 | 427.107 | Rahmaan Khan |
| CD20 | 15 | 109 | 50 | 13.43+2.00*2.30/2 | 17.74 | 887 | 46.07 | 40864.1 | 340.534 | Sahamat Khan |
| CD21 | 15 | 109 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 46.07 | 34828.9 | 290.241 | Sahamat Khan |
| CD22 | 15 | 109, 722 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 46.07 | 34828.9 | 290.241 | Sahamat Khan |
| CD23 | 4 | 118 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 46.07 | 34828.9 | 290.241 | |
| CD24 | 4 | 150, 160 | 50 | 14.32+2.00*2.41/2 | 19.66 | 983 | 39.11 | 38445.1 | 320.376 | |
| CD25 | 4 | 118 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 39.11 | 36959 | 307.991 | Kallu Singh |

**Village- Gauri Kalan**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PB6 | 3 | 714, 715, 717 | 200 | | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| PB7 | 3 | 736, 737 | 200 | | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| PB8 | 3 | 741, 1745 | 200 | | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| PB9 | 3 | 760, 763 | 200 | | 2.5 | 500 | 39.11 | 19555 | 162.958 | |
| | | | | | | | | | | |
| CD30 | | 727 to 732 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Rustam Singh |
| CD31 | | 1054, 1055, 1053 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Rajaram |
| CD32 | | 1069 to 1082 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Jagdev |
| CD33 | | 728, 762 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Pooran Singh |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD34 | | 1091 to 1096 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 46.07 | 41002.3 | 341.686 | Rajpal |
| CD35 | | 722, 723 to 54, 1056 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Jagdev |
| WHB1 | 22 | 1053, 729, 762, 1089 to 1042 | 80 | 13.94+2.00*2.51/2 | 20 | 1600 | 47.45 | 75920 | 632.667 | Saligram |

**Village- Gauri Kalan**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB6 | 10 | 456, 457 | 200 | 3.50+0.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Maksood Khan |
| SB7 | 8 | 474, 484, 485 | 300 | 3.50+0.50*1.00/2 | 2 | 600 | 39.11 | 23466 | 195.55 | Gaffar Khan |
| SB8 | 8 | 487 | 250 | 3.50+0.50*1.00/2 | 2 | 500 | 39.11 | 19555 | 162.958 | Makbool Khan |
| SB9 | 7 | 481 to 483, 490 | 200 | 3.50+0.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Kallu Kahn |
| SB10 | 6 | 456, 454, 455 | 200 | 3.50+0.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Maksood Khan |
| SB11 | 9 | 475, 480 | 200 | 3.50+0.50*1.00/2 | 2 | 400 | 39.11 | 15644 | 130.367 | Kallu Kahn |

**Village- Bahundri Block- Jaspura Tehsil- Banda, Distt. Banda (2C1B2n1e)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work | | C.S. (Area) | Work Measurement | Rate | Total Cost (Rs.) | Manday Rs. 120/Labour | Name of Farmers |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Length | Width * Height | | | | | | |
| CD1 | 8 | 186 to 188 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Bhagirath |
| CD2 | 8 | 183, 283 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 46.07 | 41002.3 | 341.686 | Anil Kumar |
| CD3 | 8 | 181, 285 | 40 | 13.97+2.00*2.40/2 | 18.7 | 748 | 46.07 | 34460.4 | 287.17 | Bhagirath |
| CD4 | 8 | 289 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Bhagirath |
| CD5 | 9 | 167 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Bhagirath |
| CD6 | 8 | 350, 351, 353, 370 | 50 | 9.64+2.00*2.10/2 | 11.8 | 590 | 46.07 | 27181.3 | 226.511 | Pooran |
| CD7 | 8 | 354, 355, 356, 357, 358, 360 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Gaffar Khan |
| CD8 | 8 | | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Rajendra Kumar |
| CD9 | 10 | 155, 362, 156, 363 | 50 | 13.37+2.00*2.10/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Gangau |
| CD10 | 10 | 364, 366, 368 | 50 | 14.32+2.00*2.41/2 | 19.66 | 983 | 46.07 | 45286.8 | 377.39 | Gangau |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD11 | 8 | 422, 423, 424, 419, 420, 421 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Raghuveer |
| CD12 | 10 | 386, 38, 406, 404, 384, 383 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Raghvendra |
| CD13 | 8 | 402, 408/1, 404 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Madan |
| CD14 | 6 | 333, 670 | 50 | 9.64+2.00*2.10/2 | 11.8 | 590 | 46.07 | 27181.3 | 226.511 | |
| CD15 | 10 | 333, 394, 651, 397, 398 | 50 | 13.37+2.00*2.46/2 | 18.9 | 945 | 46.07 | 43536.2 | 362.801 | Radhe |
| CD16 | 6 | 148, 445, 443, 444 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Rajaram |
| CD17 | 8 | 461, 462, 463, 470 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 46.07 | 41002.3 | 341.686 | Suraj |
| CD18 | 7 | 450, 451, 488 to 490 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 46.07 | 34828.9 | 290.241 | Bhanu |
| CD19 | 7 | 423, 438, 439, 492 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 46.07 | 34828.9 | 290.241 | Mahesh |
| CD20 | 6 | 488, 495, 491, 485, 493 | 40 | 10.66+2.00*2.30/2 | 14.56 | 582.4 | 46.07 | 26831.2 | 223.593 | Rajaram |
| CD21 | 8 | 410, 414, 426 to 431 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Ramgopal |
| CD22 | 8 | 457, 469, 461 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Dayashankar |
| CD23 | 10 | 200, 201, 202, 203 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 46.07 | 41002.3 | 341.686 | Avdesh |
| CD24 | 10 | 210, 199, 216, 205 | 50 | 14.32+2.00*2.41/2 | 19.66 | 983 | 46.07 | 45286.8 | 377.39 | Bhoora |
| CD25 | 10 | 382, 404, 342, 389 | 50 | 10.66+2.00*2.30/2 | 14.56 | 728 | 46.07 | 33539 | 279.491 | Rajendra |
| | | | | | | | | | | |
| SB1 | 6 | 580, 581, 582, 583 | 400 | 4.00+1.00*1.00/2 | 2 | 800 | 39.16 | 31328 | 261.067 | |
| SB2 | 6 | 743 to 755 | 400 | 4.00+1.00*1.00/2 | 2.6 | 1040 | 39.16 | 40726.4 | 339.387 | |
| SB3 | 4 | 768 to 770 | 300 | 4.00+1.00*1.00/2 | 2 | 600 | 39.16 | 23496 | 195.8 | |
| SB4 | 9 | 790 to 796 | 600 | 4.00+1.00*1.00/2 | 2 | 1200 | 39.16 | 46992 | 391.6 | |
| SB5 | 6 | 830 to 836 | 400 | 4.00+1.00*1.00/2 | 2 | 800 | 39.16 | 31328 | 261.067 | |
| SB6 | 7 | 854, 855, 851, 841 | 500 | 4.00+1.00*1.00/2 | 2 | 1000 | 39.16 | 39160 | 326.333 | |
| SB7 | 4 | 865 to 893 | 200 | 4.00+1.00*1.00/2 | 2 | 400 | 39.16 | 15664 | 130.533 | |
| SB8 | 6 | 894, 891, 901, 893 | 400 | 4.00+1.00*1.00/2 | 2 | 800 | 39.16 | 31328 | 261.067 | |
| SB9 | 2 | 885 to 889 | 100 | 4.00+1.00*1.00/2 | 2 | 200 | 39.16 | 7832 | 65.2667 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB10 | 6 | 930 to 936 | 400 | 4.00+1.00*1.00/2 | 2 | 800 | 39.16 | 31328 | 261.067 | |
| SB11 | 4 | 909 to 917 | 300 | 4.00+1.00*1.00/2 | 2 | 600 | 39.16 | 23496 | 195.8 | |
| SB12 | 7 | 896 to899 | 500 | 4.00+1.00*1.00/2 | 2 | 1000 | 39.16 | 39160 | 326.333 | |
| SB13 | 6 | 985, 997 to 1001 | 400 | 4.00+1.00*1.00/2 | 2 | 800 | 39.16 | 31328 | 261.067 | |
| SB14 | 7 | 977 to 982 | 500 | 4.00+1.00*1.00/2 | 2 | 1000 | 39.16 | 39160 | 326.333 | |
| SB15 | 4 | 1098 to 1101 | 200 | 4.00+1.00*1.00/2 | 2 | 400 | 39.16 | 15664 | 130.533 | |
| SB16 | 6 | 1033 to 1047 | 300 | 4.00+1.00*1.00/2 | 2 | 600 | 39.16 | 23496 | 195.8 | |
| SB17 | 6 | 1004 to 1016 | 200 | 4.00+1.00*1.00/2 | 2 | 400 | 39.16 | 15664 | 130.533 | |
| SB18 | 4 | 1048 to 1050 | 200 | 4.00+1.00*1.00/2 | 2 | 400 | 39.16 | 15664 | 130.533 | |

**Village- Amara**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SB19 | 4 | 2084 to 2086 | 200 | | 2.5 | 500 | 39.16 | 19580 | 163.167 | |
| SB20 | 10 | 1970, 1971, 1972 | 400 | | 2.5 | 1000 | 39.16 | 39160 | 326.333 | |
| SB21 | 5 | 1968, 1979, 1980 | 300 | | 2.5 | 750 | 39.16 | 29370 | 244.75 | |
| SB22 | 4 | 2012, 2027, 2028 | 200 | | 2.5 | 500 | 39.16 | 19580 | 163.167 | |
| CD26 | 112 | 2003 to 2005, 2017, 2018 | 50 | 13.37+2.00*2.40/2 | 18.9 | 945 | 47.95 | 45312.8 | 377.606 | Prahlad |
| CD27 | 9 | 2007, 2008, 2009, 2011, 2013, 2014 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 47.95 | 42675.5 | 355.629 | Ramsnehi |
| CD28 | 8 | 1886, 1822, 1823 | 30 | 15.94+2.00*2.48/2 | 22.25 | 667.5 | 47.95 | 32006.6 | 266.722 | Raguveer |
| CD29 | 9 | 1882, 1883, 1885, 1880, 1886 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 47.95 | 42675.5 | 355.629 | Ramsnehi |
| CD30 | 12 | 1855, 1833, 1852, 1854, 1863 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 47.95 | 42675.5 | 355.629 | Rajpal |
| CD31 | 9 | 9 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 47.95 | 36250.2 | 302.085 | Mahendra |
| CD32 | 12 | 12 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 47.95 | 42675.5 | 355.629 | Ramdayal |
| CD33 | 10 | 10 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 47.95 | 36250.2 | 302.085 | Badri |
| CD34 | 10 | 10 | 40 | 14.32+2.00*2.41/2 | 19.66 | 786.4 | 47.95 | 37707.9 | 314.232 | Gopal |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CD35 | 10 | 10 | 40 | 14.32+2.00*2.41/2 | 19.66 | 786.4 | 47.95 | 37707.9 | 314.232 | |
| CD36 | 10 | 573, 574, 568, 570, 544 | 40 | 15.94+2.00*2.48/2 | 22.25 | 890 | 47.95 | 42675.5 | 355.629 | Bhoora |
| CD37 | 10 | 594, 1856, 595, 596, 598 | 40 | 13.37+2.00*2.46/2 | 18.9 | 756 | 47.95 | 36250.2 | 302.085 | Ramdayal |
| WHB1 | 15 | 561, 564, 565, 494, 302 | 50 | 15.94+2.00*2.48/2 | 22.25 | 1112.5 | 39.11 | 43509.9 | 362.582 | Suraj Karan |
| WHB2 | 15 | 584, 591, 585, 593 | 60 | 14.78+2.00*2.70/2 | 22.65 | 1359 | 39.11 | 53150.5 | 442.921 | Gopal |
| WHB3 | 20 | 2033, 2035, 2063, 2031, 1825 | 70 | 14.78+2.00*2.70/2 | 22.65 | 1585.5 | 39.11 | 62008.9 | 516.741 | Pradeep |

## ANNEXURE-II
## LIVELIHOOD ACTION PLAN

**Annaual Action Plan for Livelihood (Physical & Financial)**

| **Project - IWMP-XI** | | | **PIA-Soil Conservatio Unit, Banda-I** | | | | | | **District- Banda** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S. No** | **Physical and financial Targets** | **Unit** | **First Year 2011-12** | | **Second Year 2012-13** | | **Third Year 2013-14** | | **Fourth Year 2014-15** | | **Total Project** | |
| | | | **Physical** | **Financial** | **Physical** | **Financial** | **Physical** | **Financial** | **Physical** | **Financial** | **Physical** | **Financial** |
| | **Livelihood activities through SHG's** | | | | | | | | | | | |
| | (1) Activity Goatary | | | | | | | | | | | |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | | | | | | | | | | |
| | (2) Activity- Back Yard Poultry | | | | | | | | | | | |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (3) Activity- Poultry , Broiler | | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 8 | 2.03 | 8 | 2.03 | 2 | 0.45 | 18 | 4.50 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (b) No. of members | No. | 0 | 0.00 | 81 | 0.00 | 81 | 0.00 | 18 | 0.00 | 180 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (4) Black Smithy | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | (5) Rope making | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (6) Tailoring | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 6 | 1.58 | 6 | 1.58 | 1 | 0.35 | 14 | 3.50 |
| | (b) No. of members | No. | 0 | 0.00 | 63 | 0.00 | 63 | 0.00 | 14 | 0.00 | 140 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | (8) Vermi Composting | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 7 | 1.80 | 7 | 1.80 | 2 | 0.40 | 16 | 4.00 |
| | (b) No. of members | No. | 0 | 0.00 | 72 | 0.00 | 72 | 0.00 | 16 | 0.00 | 160 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (9) Food processing | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 9 | 2.14 | 9 | 2.14 | 2 | 0.48 | 19 | 4.75 |
| | (b) No. of members | No. | 0 | 0.00 | 86 | 0.00 | 86 | 0.00 | 19 | 0.00 | 190 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |
| | (13) Seed Bank | | | | | | | | | | 0 | 0.00 |
| | (a) No. of SHG's | No. | 0 | 0.00 | 10 | 2.48 | 10 | 2.48 | 2 | 0.55 | 22 | 5.50 |
| | (b) No. of members | No. | 0 | 0.00 | 99 | 0.00 | 99 | 0.00 | 22 | 0.00 | 220 | 0.00 |
| | (c) Estimated income per year | Rs. | 0 | 0.00 | | | | | | | 0 | 0.00 |

**Livelihood Option for Village Groups / Community**
**Input supplied to Interested Groups/ SHGs**

| Sr. No. | Name of Activity * | Name of input | Quantity/ | Rate | No of IG / SHGs | Total Amount (Rs) |
|---|---|---|---|---|---|---|
| 1 | Organic complex | Red worms *(Eisinia fetida)*<br>*NADEP* | 2 q<br>10 Nos | 25000<br>5000 | 4<br>(40 FF) | 100000.00 |
| 2 | Goat kids | Kids | 40 Nos | 1200 | 2 (20 FF) | 48000.00 |
| | | Adult | 02 | 2500 | | 5000.00 |
| 3 | Goat rearing | Female | 10 Nos | 3000 | 1 (10 FF) | 30000.00 |
| | | Adult | 01 | 3000 | | 3000.00 |
| 4 | Motor / Diesel repairing | Tool Kit | All tools | 25000 | 1 | 25000.00 |
| 5 | Masala Grinding | Pulvelizer | 02 | 37000 | 2 (20 FF) | 74000.00 |
| 6 | Oil Expeller | Oil Expeller | 01 | 84000 | 1 (10 FF) | 84000.00 |
| 7 | Poultry (Broiler) | Chicks | 1000 | 25 per chicks | 1 (10 FF) | 25000.00 |
| 8 | Wooden furniture | Instruments | 01 | 61000 | 1 (10 FF) | 61000.00 |
| 9 | Mini Dal Mill | Machine | 01 | 42000 | 1 (10 FF) | 42000.00 |
| 10 | Dairy | Buffaloes / Cows | 10 | 25000 | 1 (10 FF) | 250000.00 |
| 11 | Back yard Poultry | Chicks | 2000 | 18 | 2 (20 FF) | 36000.00 |
| 12 | Linseed rope making | Rope making machine | 01 | 35000 | 1 (10 FF) | 35000.00 |
| 13 | Organic production | Registration | 100 ha | 6000 | 5 | 120000.00 |
| 14 | Tailoring | Sieving Machine | 5 in 01 SHG | 25000 | 2 | 25000.00 |

Note: Maximum Seed Money will be Rs 25000/- for one SHG / Individual. Repayment limit up to 18 months.

## ANNEXURE-III

### 1. Annaual Action Plan for Agriculture Production System & Micro Enterprises (Physical & Financial)

| Project - IWMP-XI | | | PIA-Soil Conservatio Unit, Banda-I | | | | | | District- Banda | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No | Physical and financial Targets | Unit | First Year 2011-12 | | Second Year 2012-13 | | Third Year 2013-14 | | Fourth Year 2014-15 | | Total Project | |
| | | | Physical | Financial | Physical | Financial | Physical | Financial | Physical | Financial | Physical | Financial |
| | **Production system** | | | | | | | | | | | |
| | (1) Agriculture | | | | | | | | | | | |
| | (a) Crop demonstration | | | | | | | | | | | |
| | (1) No. of dem. | No. | 0 | 0.00 | 196 | 8.22 | 196 | 8.22 | 44 | 1.83 | 435 | 18.26 |
| | (2) Area | ha. | | | 78 | | 78 | | 17 | | 174 | 0.00 |
| | (b) Seed Production | | | | | | | | | | | |
| | (1) No. of dem. | No. | 0 | 0.00 | 192 | 8.04 | 192 | 8.04 | 43 | 1.79 | 427 | 17.87 |
| | (2) Area | ha. | 0 | | 77 | | 77 | | 17 | | 171 | 0.00 |
| | (2) Horticulture/ Agri-Horticulture | | | | | | | | | | | |
| | (a) Area | ha. | 0 | 0.00 | 12 | 2.19 | 12 | 2.19 | 3 | 0.49 | 27 | 4.86 |
| | (b) No. of Plants | No. | | 0.00 | | | | | | | 0 | 0.00 |
| | (4) Animal husbandry | | | | | | | | | | | |
| | A. fodder production | No. of Units / Farmers | 0 | 0.00 | 131 | 0.79 | 131 | 0.79 | 29 | 0.18 | 292 | 1.75 |
| | B. Vaccination/Medication | No. of Animals | 0 | 0.00 | 131 | 0.08 | 131 | 0.08 | 29 | 0.02 | 290 | 0.18 |
| | C. Artificial Insemination | No. of Animals | 0 | 0.00 | 133 | 0.05 | 133 | 0.05 | 30 | 0.01 | 295 | 0.12 |
| | D. Natural Service. | He Buffalo | 0 | 0.00 | 3 | 0.76 | 3 | 0.76 | 1 | 0.17 | 7 | 1.68 |

## *2.* Estimates of Different Participatory Crop Trials

| **Pulses** | **Rabi** | | | |
|---|---|---|---|---|
| **Integrated Crop Management** | **Lentil** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Narendra Masoor-1, DPL-15, L-4076, Pusa Vaibhav | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late- IPL-81, K-75 | | | |
| 2. Sowing Time | IInd week of October | | | |
| | | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 50 kg / ha (F1,F2, Certified) | 80 | 5000 | 2000.00 |
| 7. Use Weedicide | Pendimethalin 3.3 li/ha | 465 | 1918 | 767.25 |
| | (Pre emergence) | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 25:60:30 NPK | | | | |
| i) DAP* | 130 kg | 15 | 2438 | 975.00 |
| ii) SSP* | 375 kg | 8 | 3750 | 1500.00 |
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 40 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |

| | | | | |
|---|---|---|---|---|
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **4743.25** |
| **Integrated Crop Management** | **Chickpea** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | KGD-1168, KWR-108, Pusa-256, Pusa-367 | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late- Udai | | | |
| 2. Sowing Time | 1st week of October | | | |
| | | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 80 kg / ha (F1,F2, Certified) | 65 | 6500 | 2600.00 |
| 7. Use Weedicide | Pendimethalin 3.3 li/ha | 465 | 1918 | 767.25 |
| | (Pre emergence) | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 25:60:30 NPK | | | | |
| i) DAP* | 130 kg | 15 | 2438 | 975.00 |
| ii) SSP* | 375 kg | 8 | 3750 | 1500.00 |

| | | | | |
|---|---|---|---|---|
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 40 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| NPV | 250 LE /ha at the time pod formation | 200 | 250 | 100.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **5443.25** |
| **Integrated Crop Management** | **Field Pea** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | KMPR-400, KPMR-522, Rachna, Shikha | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | | | | |
| 2. Sowing Time | IInd week of October | | | |
| | | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 100 kg / ha (F1,F2, Certified) | 60 | 7500 | 3000.00 |
| 7. Use Weedicide | Pendimethalin 3.3 li/ha | 465 | 1918 | 767.25 |
| | (Pre emergence) | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |

| | | | | |
|---|---|---|---|---|
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 25:60:30 NPK | | | | |
| i) DAP* | 130 kg | 15 | 2438 | 975.00 |
| ii) SSP* | 375 kg | 8 | 3750 | 1500.00 |
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 40 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **5743.25** |
| **Integrated Crop Management** | **Urd** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Shekhar-2, Azad-1, PU-35, Narendra Urd-1 | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | | | | |
| 2. Sowing Time | Last week of July | | | |
| | | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 16 kg / ha (F1,F2, Certified) | 100 | 2000 | 800.00 |
| 7. Use Weedicide | Pendimethalin 3.3 li/ha | 465 | 1918 | 767.25 |

| | | | | |
|---|---|---|---|---|
| | (Pre emergence) | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 25:60:30 NPK | | | | |
| i) DAP* | 130 kg | 15 | 2438 | 975.00 |
| ii) SSP* | 375 kg | 8 | 3750 | 1500.00 |
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 40 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **3543.25** |
| **Integrated Crop Management** | **Moong** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | T.M-9937, Meha, Pant Moong-1,2 Late- Type-44, Samrat | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| 2. Sowing Time | Last week of June | | | |

| | | Rate(Rs/kg/ Pkt) | Cost per ha (Rs) | Demonstration Cost (Rs) |
|---|---|---|---|---|
| 3. Required Seed | 16 kg / ha (F1,F2, Certified) | 100 | 2000 | 800.00 |
| 7. Use Weedicide | Pendimethalin 3.3 li/ha (Pre emergence) | 465 | 1918 | 767.25 |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 25:60:30 NPK | | | | |
| i) DAP* | 130 kg | 15 | 2438 | 975.00 |
| ii) SSP* | 375 kg | 8 | 3750 | 1500.00 |
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 40 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| NPV | 250 LE /ha at the time pod formation | 200 | 250 | 100.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **3643.25** |
| **Integrated Crop Management** | **Arhar** | | | |
| **Area of Demonstration - 0.40** | | | | |

| ha | | | | |
|---|---|---|---|---|
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Paras, UPAS-120, Type-21, Pusa-992 (Wilt rest.)<br>Late- Bahar, Narendra Arhar-1, Azad | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | | | | |
| 2. Sowing Time | Late- Month July | | | |
| | Early Last Week of June | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 20 kg / ha (F1,F2, Certified) | 120 | 3000 | 1200.00 |
| 7. Use Weedicide | - | - | - | - |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | - | | | |
| ii) Rhizobium + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 15:45:20 NPK | | | | |
| i) DAP* | 100 kg | 15 | 2438 | 750.00 |
| ii) SSP* | 250 kg | 8 | 3750 | 1000.00 |
| iii) Urea | In case of SSP 54 kg Urea applied | 6 | 405 | 162.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 30 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |

| | | | | |
|---|---|---|---|---|
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total** | | | **2951.00** |
| **Integrated Crop Management** | **Linseed** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Sweta, Subhra, Garima, Shekhar, Parwati | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late- Laxmi-27, Padmini | | | |
| 2. Sowing Time | | | | |
| | Mid October | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 30 kg / ha (F1,F2, Certified) | 75 | 2813 | 1125.00 |
| 7. Use Weedicide | - | - | - | - |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | - | - | - | - |
| 12. Recommended dose of fertilizers | | | | |
| 50:40:40 NPK | | | | |
| i) DAP* | 125 kg | 15 | 2344 | 937.50 |
| ii) SSP* | 275 kg | 8 | 2750 | 1100.00 |
| iii) Urea | 50 kg | 6 | 375 | 150.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 30 kg /ha Sulphur added if SSP used | | | |

| | | | | |
|---|---|---|---|---|
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **2949.50** |
| **Integrated Crop Management** | **Mustard** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Varuna, Kranti, Rohini, Vaibhav, Pusa Bold | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late-Ashirvad, Vardan | | | |
| 2. Sowing Time | | | | |
| | October first week | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 6 kg / ha (F1,F2, Certified) | 150 | 1125 | 450.00 |
| 7. Use Weedicide | - | - | - | - |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | - | - | - | - |
| 12. Recommended dose of fertilizers | | | | |
| 60:50:30 NPK | | | | |
| i) DAP* | 180 kg | 15 | 3375 | 1350.00 |

| | | | | |
|---|---|---|---|---|
| ii) SSP* | 275 kg | 8 | 2750 | 1100.00 |
| iii) Urea | 75 kg | 6 | 563 | 225.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 30 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **2762.00** |
| **Integrated Crop Management** | **Toriya** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Type-9, PT-303, PT-30 | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late-Bhawani | | | |
| 2. Sowing Time | | | | |
| | First Fortnight of September | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 4 kg / ha (F1,F2, Certified) | 200 | 1000 | 400.00 |
| 7. Use Weedicide | - | - | - | - |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | - | - | - | - |
| 12. Recommended dose of fertilizers | | | | |

| | | | | |
|---|---|---|---|---|
| 50:30:30 NPK | | | | |
| i) DAP* | 125 kg | 15 | 2344 | 937.50 |
| ii) SSP* | 275 kg | 8 | 2750 | 1100.00 |
| iii) Urea | 50 kg | 6 | 375 | 150.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| * Either one | 30 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **2224.50** |
| **Integrated Crop Management** | **Til (Sesamum)** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Type-4,12,13,78, Shekhar | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | Late- Pragati, Tarun | | | |
| 2. Sowing Time | | | | |
| | June last week to July 15 | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 4 kg / ha (F1,F2, Certified) | 150 | 750 | 300.00 |
| 7. Use Weedicide | - | - | - | - |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |

| | | | | |
|---|---|---|---|---|
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | - | - | - | - |
| 12. Recommended dose of fertilizers | | | | |
| 30:15:25 NPK | | | | |
| i) DAP* | 80 kg | 15 | 1500 | 600.00 |
| ii) SSP* | 225 kg | 8 | 2250 | 900.00 |
| iii) Urea | 30 kg | 6 | 225 | 90.00 |
| iv) MOP | 40 kg | 7 | 350 | 140.00 |
| * Either one | 30 kg /ha Sulphur added if SSP used | | | |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **1692.00** |
| **Integrated Crop Management** | **Wheat** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | UP-2338,WH-542,PBW-343,502,550,K-9006,307 | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| | | | | |
| 2. Sowing Time | | | | |
| | Mid October to first week of Nov | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 100 kg / ha (F1,F2, Certified) | 25 | 3125 | 1250.00 |

| | | | | |
|---|---|---|---|---|
| 7. Use Weedicide | Total - at 28 to 32 at after sowing | 950 | 1188 | 475.00 |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 120:60:40 NPK | | | | |
| i) DAP* | 325 kg | 15 | 6094 | 2437.50 |
| ii) SSP* | - | - | 0 | 0.00 |
| iii) Urea | 100 kg | 6 | 750 | 300.00 |
| iv) MOP | 80 kg | 7 | 700 | 280.00 |
| v) Zinc | 30 kg /ha | 25 | 938 | 375.00 |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **5781.50** |
| **Integrated Crop Management** | **Maize** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | Hyb. Duccan-103, 105, Sankul-Dhawal, Shakti-1, Popcorn- Amber, V.L. Amber, Perl popcorn | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |

| | | | | |
|---|---|---|---|---|
| 2. Sowing Time | | | | |
| | 15 Oct. to 15 Nov. | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 22 kg / ha (F1,F2, Certified) | 60 | 1650 | 660.00 |
| 4. Seed Treatement | Thirum & 25 ml Chloropiryphose | 60 | 75 | 30.00 |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 100:60:40 NPK | | | | |
| i) DAP* | 265 kg | 15 | 4969 | 1987.50 |
| ii) SSP* | - | - | 0 | 0.00 |
| iii) Urea | 80 kg | 6 | 600 | 240.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| v) Zinc | - | - | 0 | 0.00 |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **3756.50** |
| **Integrated Crop Management** | **Maize** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |

| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
|---|---|---|---|---|
| 1. Name of Varieties | Hybrid- Ganga-11, Sartaj, Prakash, Pusa Hybrid Maize5, Composite-Prabhat, Navjyoti, Pusa Composite-2, Naveen | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| 2. Sowing Time | | | | |
| | Mid June | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 20 kg / ha (F1,F2, Certified) | 40 | 1000 | 400.00 |
| 4. Seed Treatement | Thirum & 25 ml Chloropiryphose | 60 | 75 | 30.00 |
| | | | | |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 100:60:40 NPK | | | | |
| i) DAP* | 265 kg | 15 | 4969 | 1987.50 |
| ii) SSP* | - | - | 0 | 0.00 |
| iii) Urea | 80 kg | 6 | 600 | 240.00 |
| iv) MOP | 50 kg | 7 | 438 | 175.00 |
| v) Zinc | - | - | 0 | 0.00 |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | 0 | |

| | | | | |
|---|---|---|---|---|
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **3496.50** |
| **Integrated Crop Management** | **Sorghum** | | | |
| **Area of Demonstration - 0.40 ha** | | | | |
| **Detail of Demonstration** | **Intervention / Technology Adopted** | **Organizations for obtaining Seed** | | |
| 1. Name of Varieties | CSV-13, 15, 1616, Bundela. CSH-16 | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | | |
| 2. Sowing Time | June last to July first week | **Rate(Rs/kg/ Pkt)** | **Cost per ha (Rs)** | **Demonstration Cost (Rs)** |
| 3. Required Seed | 12 kg / ha (F1,F2, Certified) | 40 | 600 | 240.00 |
| 4. Seed Treatement | Thirum & 25 ml Chloropiryphose | 60 | 75 | 30.00 |
| 11. Bio Fertilizers/Bio-agents | | | | |
| i) Azatobactor + PSB | 5 Pkt + 5 Pkt = 10 Pkt @ Rs | 7.5 | 94 | 37.50 |
| ii) Rhizobium + PSB | - | - | - | - |
| iii) Trichoderma | 1.50 kg /ha (Soil treatment) | 136 | 255 | 102.00 |
| 12. Recommended dose of fertilizers | | | | |
| 80:40:20 NPK | | | | |
| i) DAP* | 280 kg | 15 | 5250 | 2100.00 |
| ii) SSP* | - | - | 0 | 0.00 |
| iii) Urea | 100 kg | 6 | 750 | 300.00 |
| iv) MOP | 80 kg | 7 | 700 | 280.00 |
| v) Zinc | - | - | 0 | 0.00 |
| 13. IPM | | | | |
| Spray of Neem Seed Kernal | 10 | 30 | 375 | 150.00 |

| | | | | |
|---|---|---|---|---|
| Mataka Khad | 15 lit/kg Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2 | 155 | 62.00 |
| Insecticides/Fungicides | If required One Dusting of Methyle Paratheon powder | | | |
| | 25 kg / ha | 25 | 781 | 312.50 |
| | **Total (Less SSP)** | | | **3614.00** |

**Details of Demonstration under Agriculture Production System**

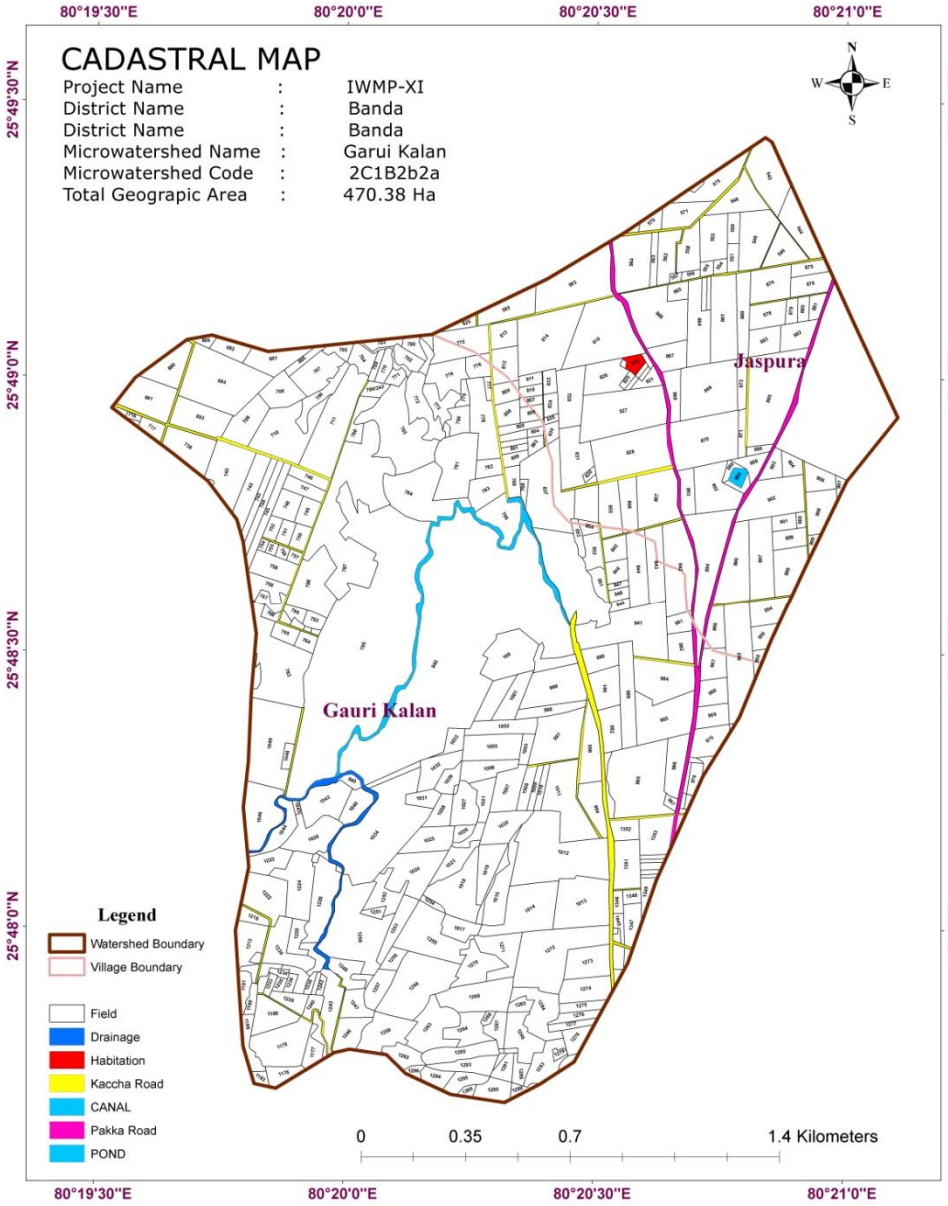
| **Project- IWMP-XI** | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***S. No.*** | ***No. of Farmers*** | ***Crop*** | ***Variety*** | ***Area (ha)*** | ***Total cost of demon. (Rs.)*** | ***Beneficiary Contribution (Rs.)*** | ***Share of Project fund (Rs.)*** | ***Prop. date of sowing*** | ***Exp. Crop maturity date*** | ***Prop. Crop cutting Date*** | ***Productivity (Q/ha)*** | | ***Total Seed*** | ***Expected Seed Exchange*** | | ***Remarks*** |
| | | | | | | | | | | | **Existing** | **Expected** | **Production (Qtl.)** | **No of Farmers** | **Quantity (Qtl.)** | |
| | **Kharif** | | | | | | | | | | | | | | | |
| 1 | 240 | Urd | Shekhar-2, Azad-1/ PU-35/19 | 48.00 | 1.701 | 0.060 | 1.641 | Last June to Mid July | Mid September | 25-Sep | 3.48 | 5.6 | 268.8 | 1792 | 107.52 | |
| | | | | | | 0.221 | 1.480 | | | | | | | | | |
| 2 | 200 | Sorghum | Bundela, CSV-15, 13 | 40.00 | 1.446 | 0.051 | 1.395 | Last June to Mid July | Mid September | 25-Sep | 4.2 | 6.2 | 248 | 2067 | 206.67 | |

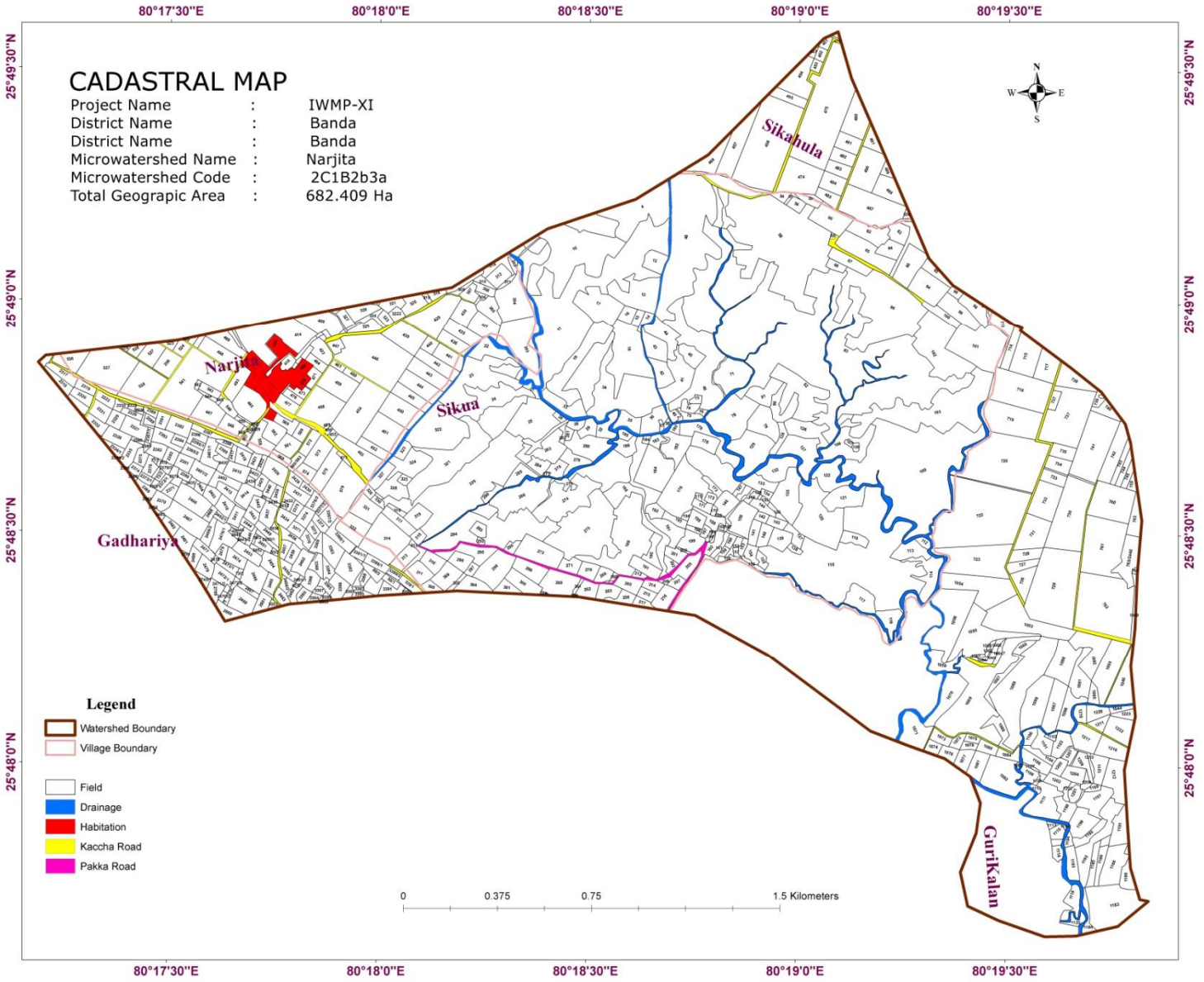
| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.188 | 1.258 | | | | | | | | | |
| 3 | 240 | Arhar | Paras, UPAS-120 | 48.00 | 1.416 | 0.050 | 1.367 | Last June-July | Oct (UPAS) | 30-Sep | 5.34 | 7.6 | 364.8 | 1459 | 291.84 | |
| | | | | | | 0.184 | 1.232 | | March (Paras) | 25-Mar | | | | | | |
| 4 | 200 | Til | Pragati, Shekhar | 40.00 | 0.677 | 0.024 | 0.653 | 15-Jul | September | 30-Sep | 1.8 | 3.6 | 144 | 3600 | 108.00 | |
| | **Rabi** | | | | | 0.088 | 0.589 | | | | | | | | | |
| 1 | 400 | Lentil | DPL-15, K-75 | 80.00 | 3.795 | 0.133 | 3.662 | 15-Oct | Feb | 5-Feb | 4.9 | 6.5 | 520 | 867 | 433.33 | |
| | | | | | | 0.493 | 3.301 | | | | | | | | | |
| 2 | 320 | Chickpea | KDG-1168, KWR-108 | 64.00 | 3.484 | 0.122 | 3.362 | 15-30 October | Las Feb to Mid March | 2-10 March | 5.62 | 8.5 | 544 | 680 | 476.00 | |
| | | | | | | 0.453 | 3.031 | | | | | | | | | |
| 3 | 320 | Field Pea | KPMR-400, 522 | 64.00 | 3.676 | 0.129 | 3.547 | October | March | 5-Mar | 6.2 | 9.5 | 608 | 760 | 570.00 | |
| | | | | | | 0.478 | 3.198 | | | | | | | | | |
| 4 | 240 | Linseed | Parwati, Padmini | 48.00 | 1.416 | 0.050 | 1.366 | October | Feb-March | 27 Feb to 5 March | Mixed | 5.6 | 268.8 | 1075 | 215.04 | |
| | | | | | | 0.184 | 1.2 | | | | | | | | | |

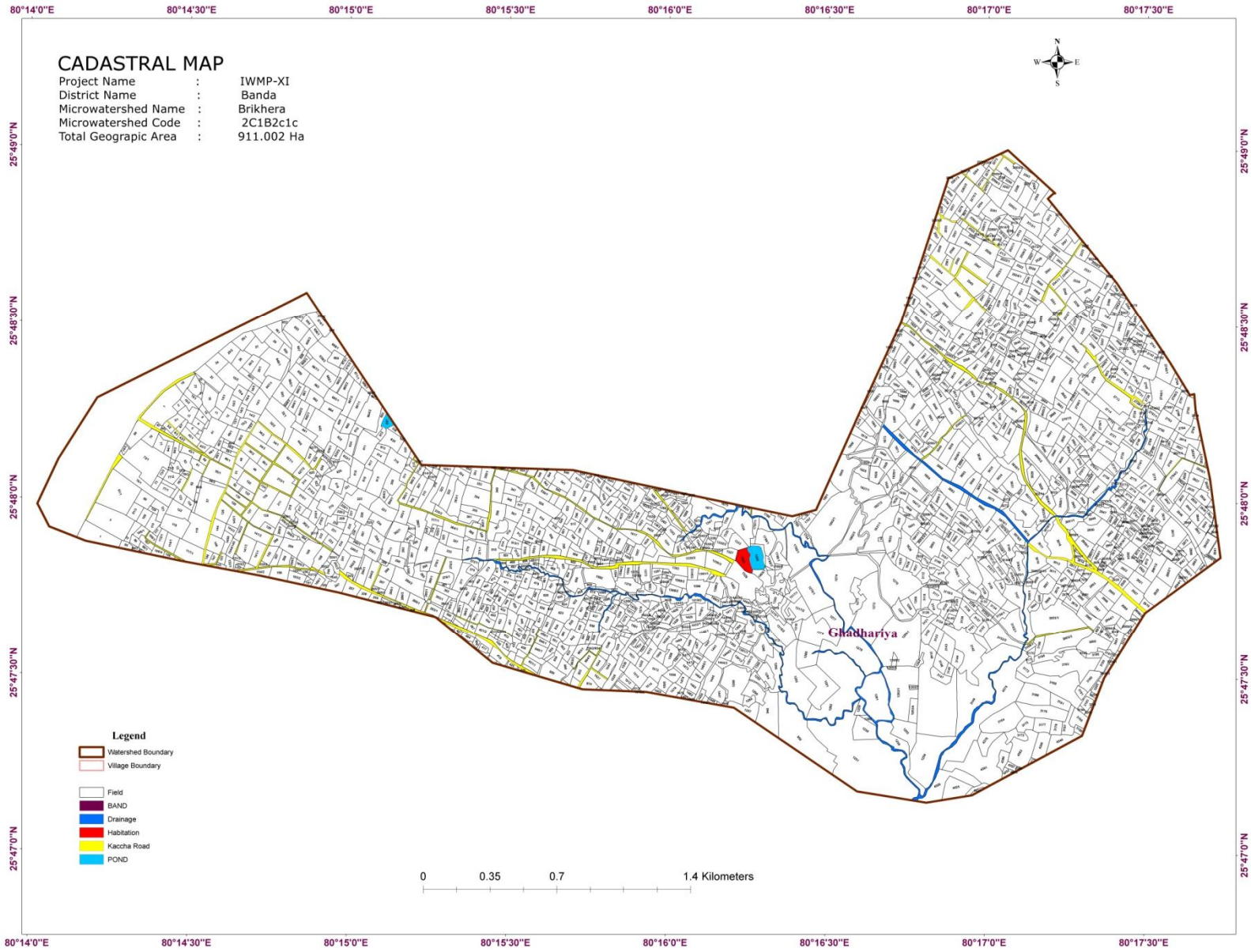
| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 32 | | | | | | | | | |
| 5 | 200 | Mustard | Maya, Kranti | 40.00 | 1.1048 | 0.039 | 1.066 | October | Feb | 15-120 Feb | Mixed | 4.8 | 192 | 3840 | 153.60 | |
| | | | | | | 0.144 | 0.961 | | | | | | | | | |
| | **Total** | | | | | **3.088** | **34.340** | | | | | | | | | |

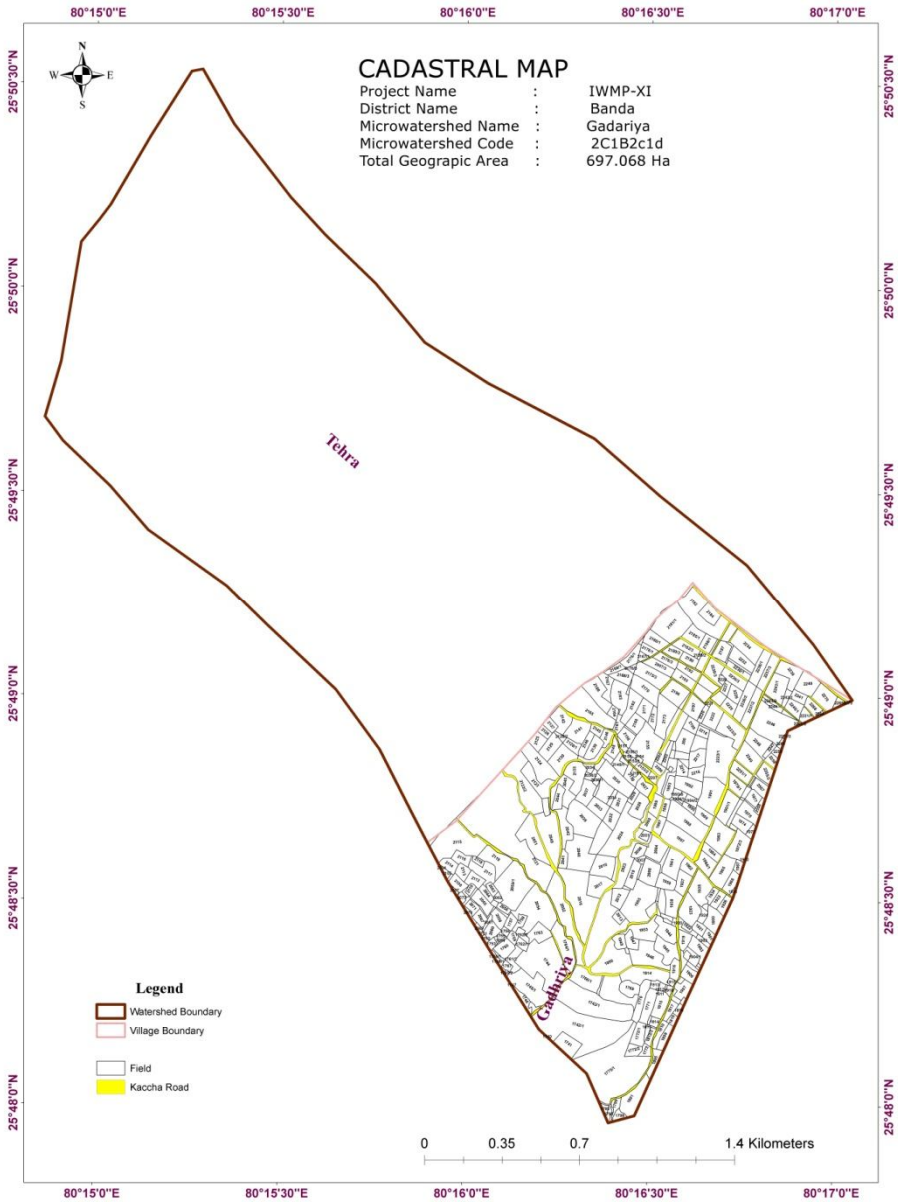
**NOTE: List of beneficiaries for crop demonstration trials is kept in project file and it is located on the the map of Participatory Crop Demonstration Trials (Crop Action Plan)**

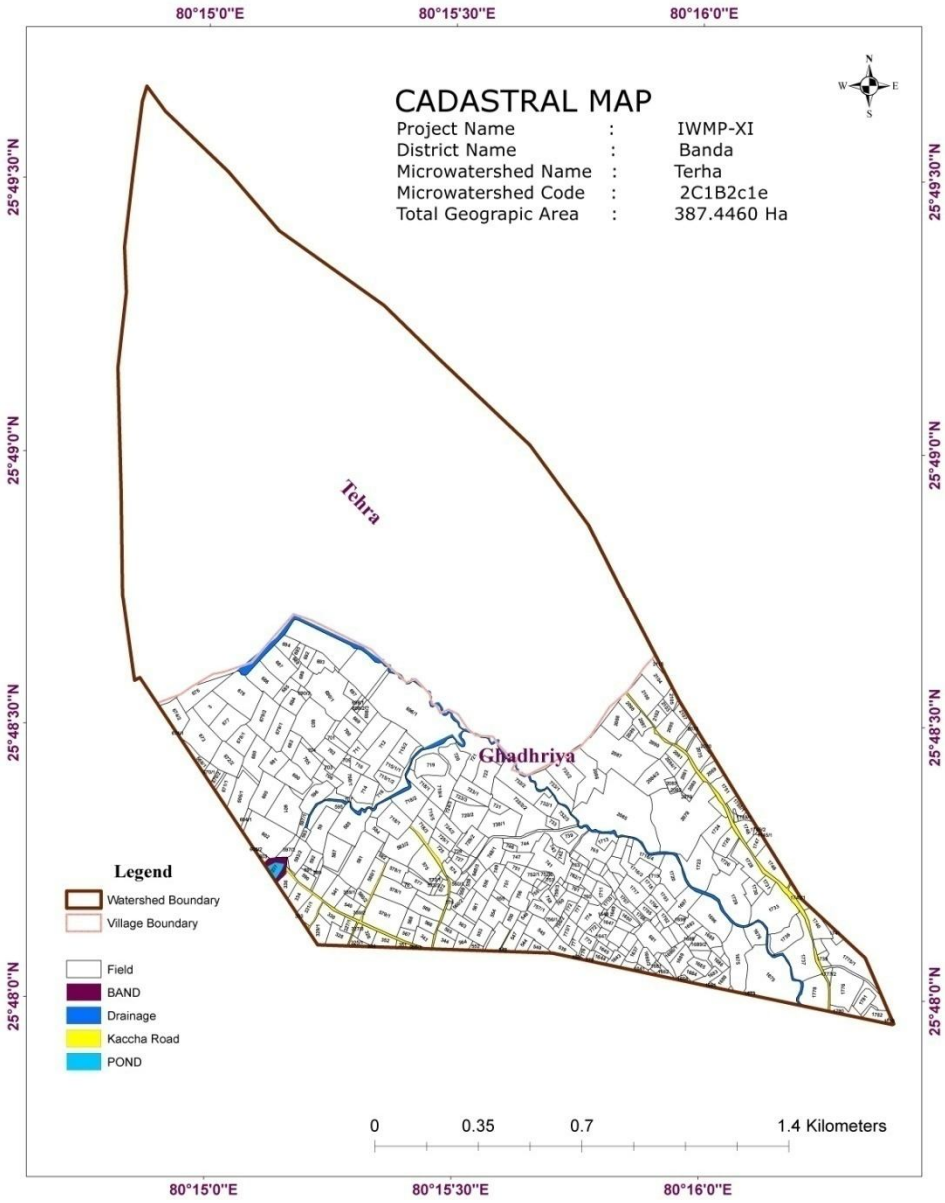
# MAPS

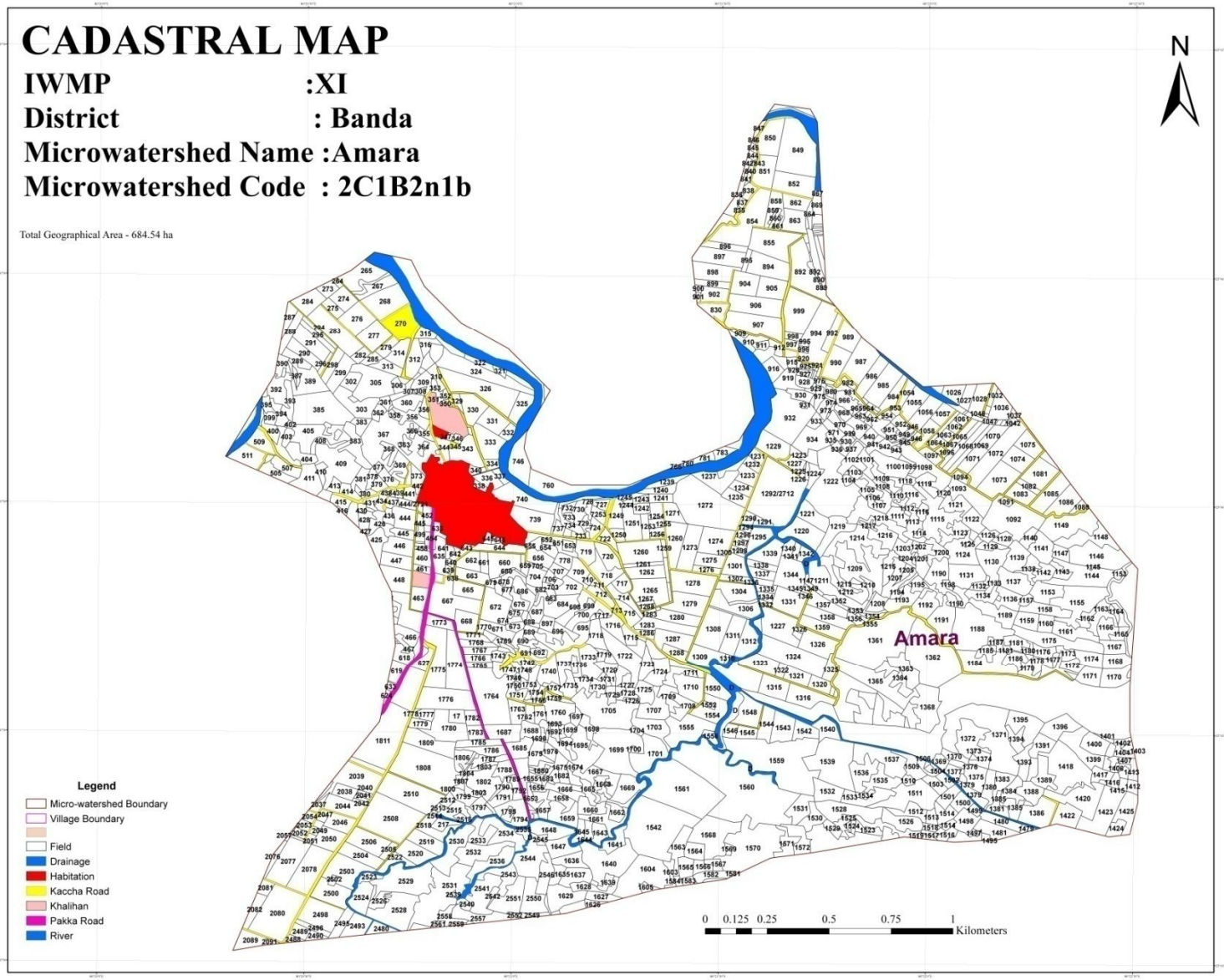

CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
District Name : Banda
Microwatershed Name : Garui Kalan
Microwatershed Code : 2C1B2b2a
Total Geograpic Area : 470.38 Ha
N
W
E
S
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
Jaspura
Gauri Kalan
Legend
Watershed Boundary
Village Boundary
Field
Drainage
Habitation
Kaccha Road
CANAL
Pakka Road
POND
0
0.35
0.7
1.4 Kilometers

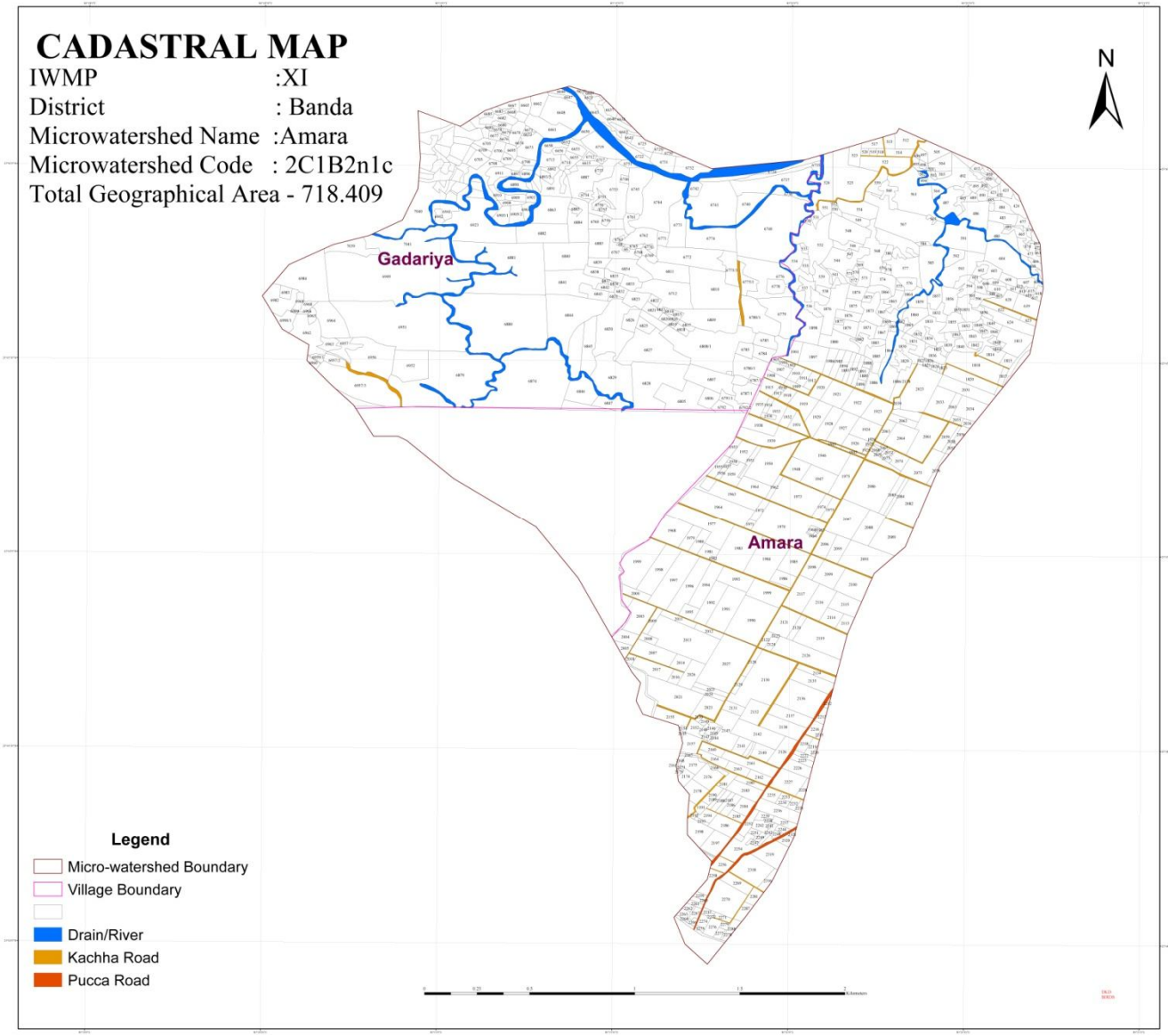

CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
District Name : Banda
Microwatershed Name : Narjita
Microwatershed Code : 2C1B2b3a
Total Geograpic Area : 682.409 Ha
80°17'30"E
80°18'0"E
80°18'30"E
80°19'0"E
80°19'30"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
N
W
E
S
Sikahula
Narjita
Sikua
Gadhariya
GuriKalan
Legend
Watershed Boundary
Village Boundary
Field
Drainage
Habitation
Kaccha Road
Pakka Road
0
0.375
0.75
1.5 Kilometers

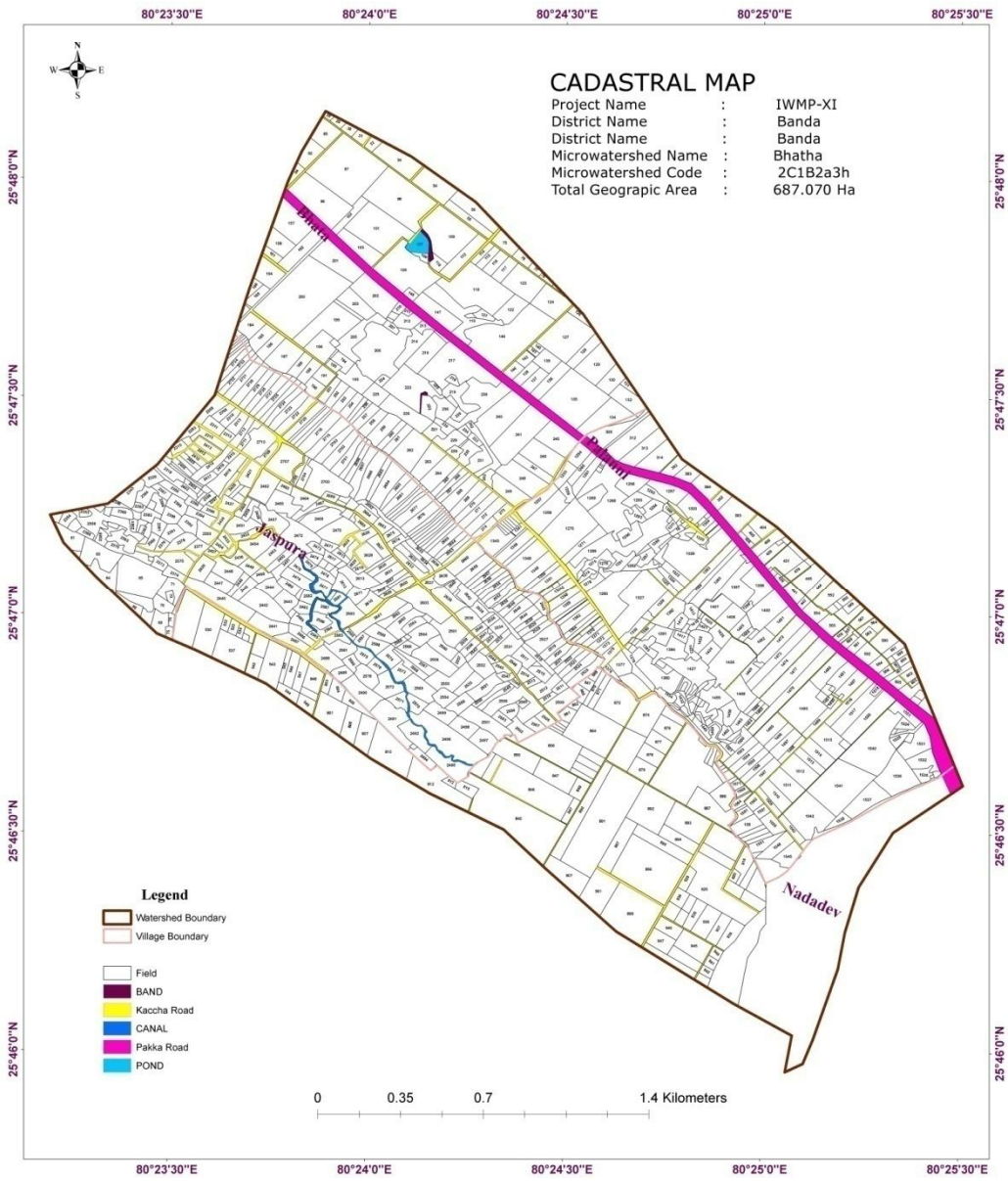

CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Brikhera
Microwatershed Code : 2C1B2c1c
Total Geograpic Area : 911.002 Ha
80°14'0"E
80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E
80°17'30"E
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
N
W
E
S
Ghadhariya
Legend
Watershed Boundary
Village Boundary
Field
BAND
Drainage
Habitation
Kaccha Road
POND
0
0.35
0.7
1.4 Kilometers


CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gadariya
Microwatershed Code : 2C1B2c1d
Total Geograpic Area : 697.068 Ha
Tehra
Gadariya
Legend
Watershed Boundary
Village Boundary
Field
Kaccha Road
0 0.35 0.7 1.4 Kilometers
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E
25°50'30"N
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N


80°15'0"E
80°15'30"E
80°16'0"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Terha
Microwatershed Code : 2C1B2c1e
Total Geograpic Area : 387.4460 Ha
Tehra
Ghadhriya
Legend
Watershed Boundary
Village Boundary
Field
BAND
Drainage
Kaccha Road
POND
0
0.35
0.7
1.4 Kilometers


CADASTRAL MAP
IWMP :XI
District : Banda
Microwatershed Name :Amara
Microwatershed Code : 2C1B2n1b
Total Geographical Area - 684.54 ha
N
Amara
Legend
Micro-watershed Boundary
Village Boundary
Field
Drainage
Habitation
Kaccha Road
Khalihan
Pakka Road
River
0 0.125 0.25 0.5 0.75 1
Kilometers


CADASTRAL MAP
IWMP :XI
District : Banda
Microwatershed Name :Amara
Microwatershed Code : 2C1B2n1c
Total Geographical Area - 718.409
N
Gadariya
Amara
Legend
Micro-watershed Boundary
Village Boundary
Drain/River
Kachha Road
Pucca Road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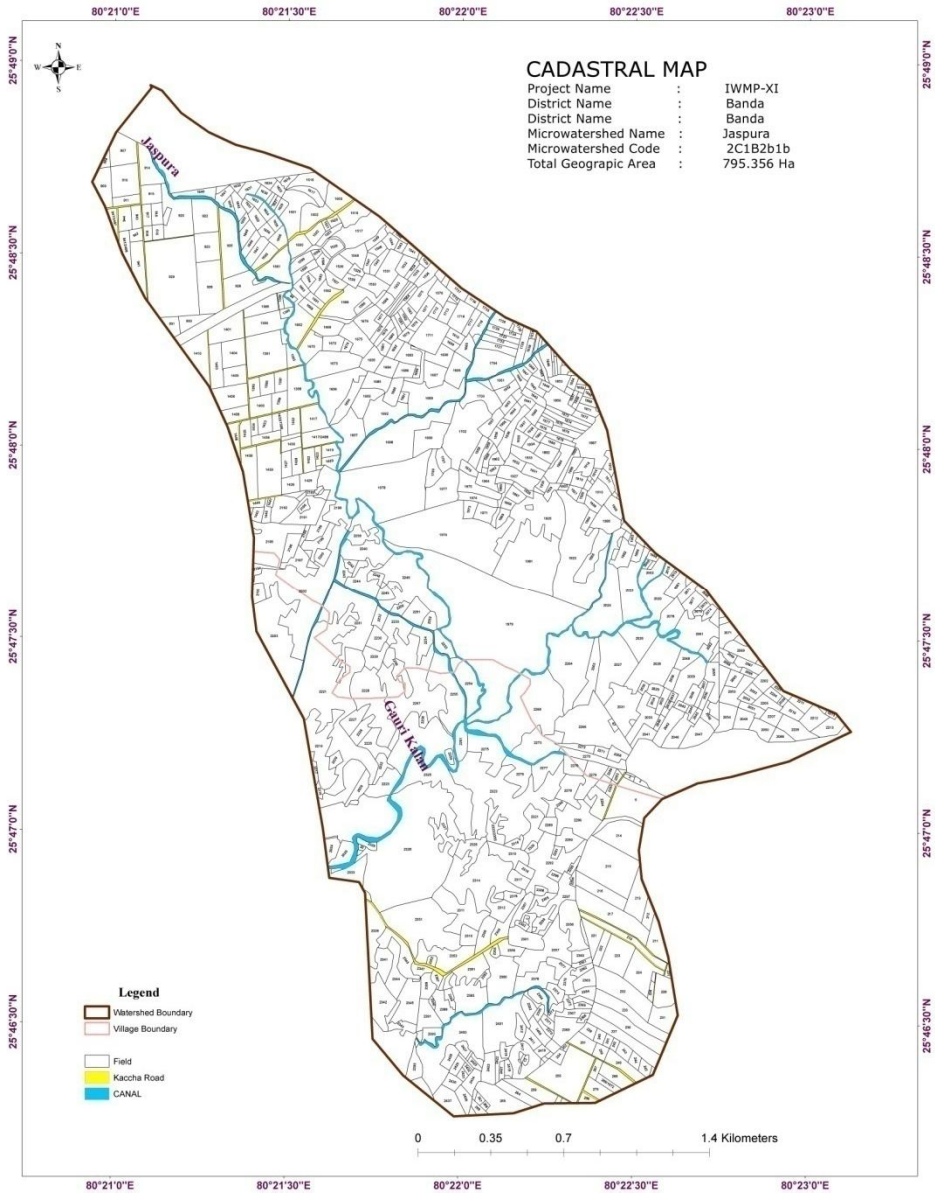
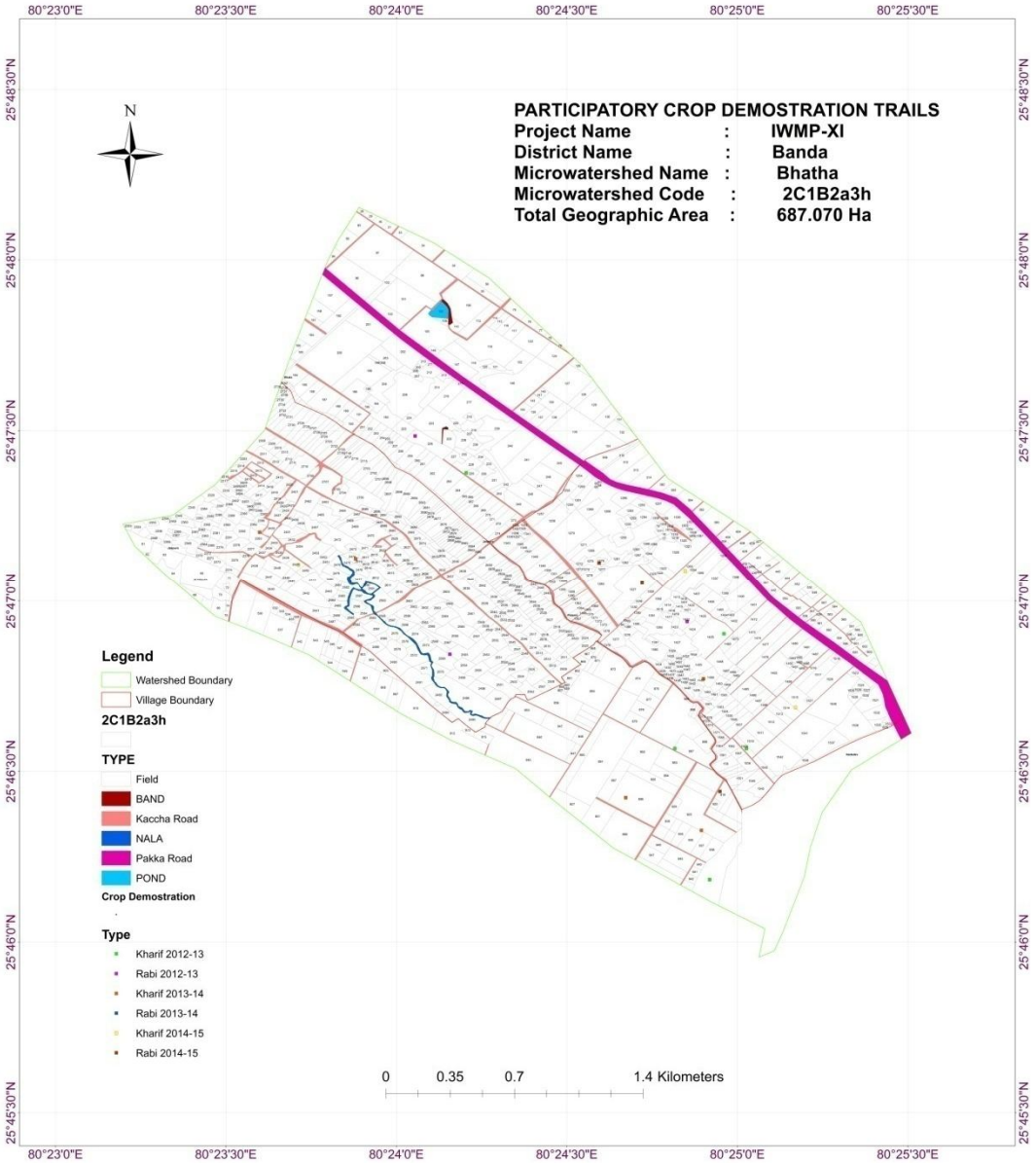
80°24'0"E
80°24'30"E
80°25'0"E
80°25'30"E
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
District Name : Banda
Microwatershed Name : Bhatha
Microwatershed Code : 2C1B2a3h
Total Geograpic Area : 687.070 Ha
Jaspura
Nadadev
Legend
Watershed Boundary
Village Boundary
Field
BAND
Kaccha Road
CANAL
Pakka Road
POND
0
0.35
0.7
1.4 Kilometers


CADASTRAL MAP
Project Name : IWMP-XI
District Name : Banda
District Name : Banda
Microwatershed Name : Jaspura
Microwatershed Code : 2C1B2b1b
Total Geograpic Area : 795.356 Ha
Jaspura
Gauri Kalwa
Legend
Watershed Boundary
Village Boundary
Field
Kaccha Road
CANAL
0 0.35 0.7 1.4 Kilometers
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E
80°23'0"E
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N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80°23'30"E
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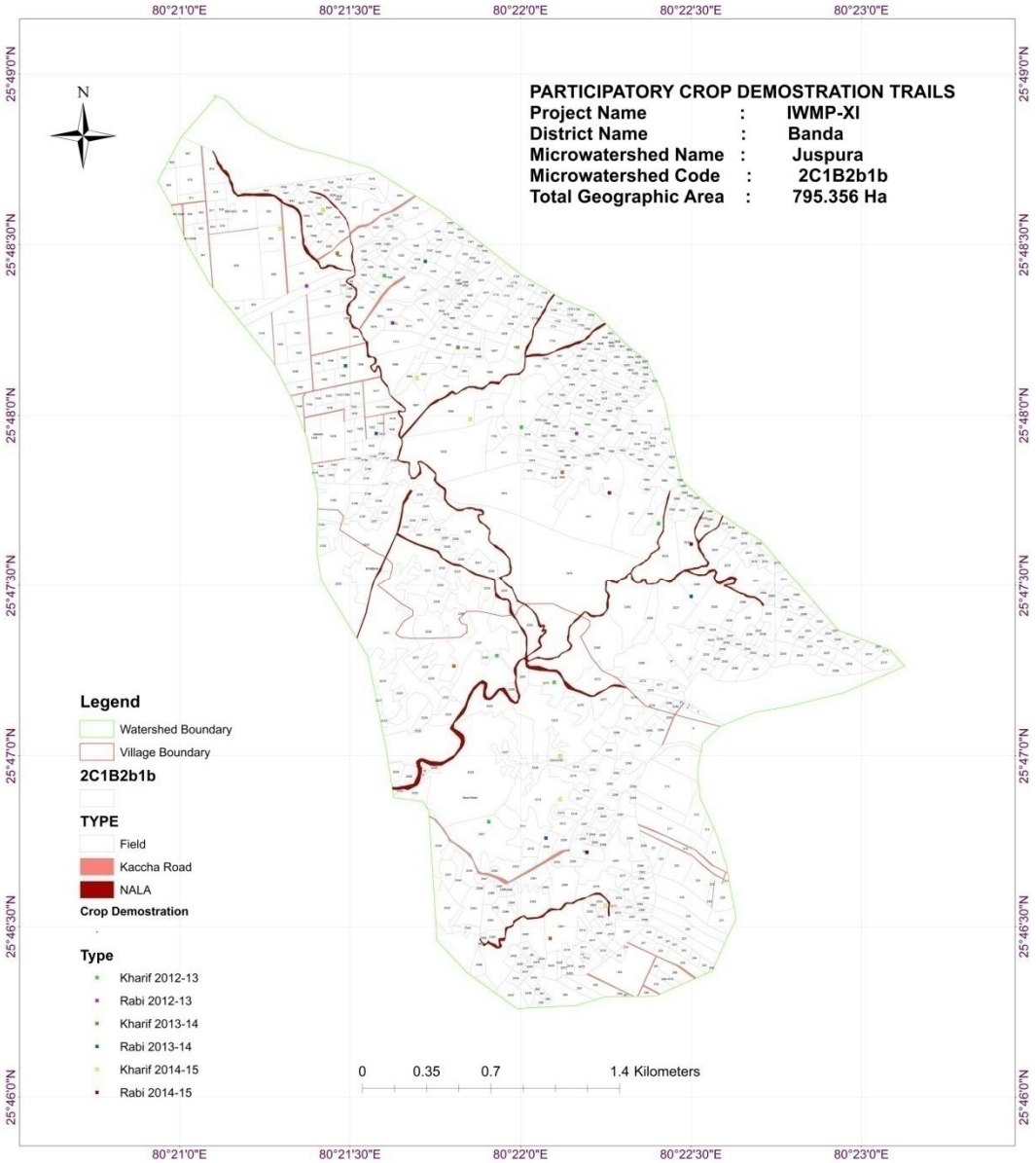
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Bhatha
Microwatershed Code : 2C1B2a3h
Total Geographic Area : 687.070 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2a3h
TYPE
Field
BAND
Kaccha Road
NALA
Pakka Road
POND
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0
0.35
0.7
1.4 Kilometers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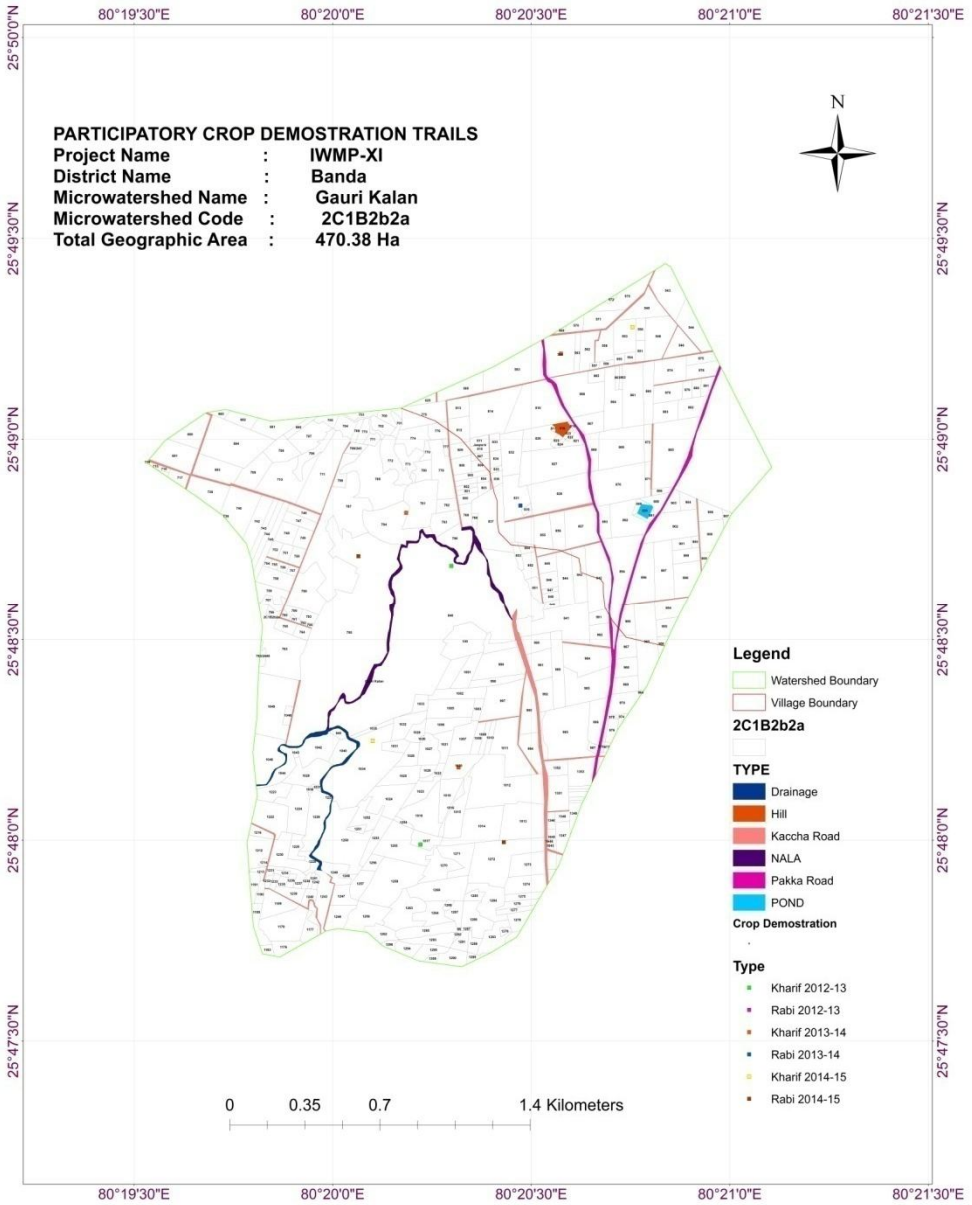
80°21'30"E
80°22'0"E
80°22'30"E
80°23'0"E
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Juspura
Microwatershed Code : 2C1B2b1b
Total Geographic Area : 795.356 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2b1b
TYPE
Field
Kaccha Road
NALA
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0 0.35 0.7 1.4 Kilometers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80°20'0"E
80°20'30"E
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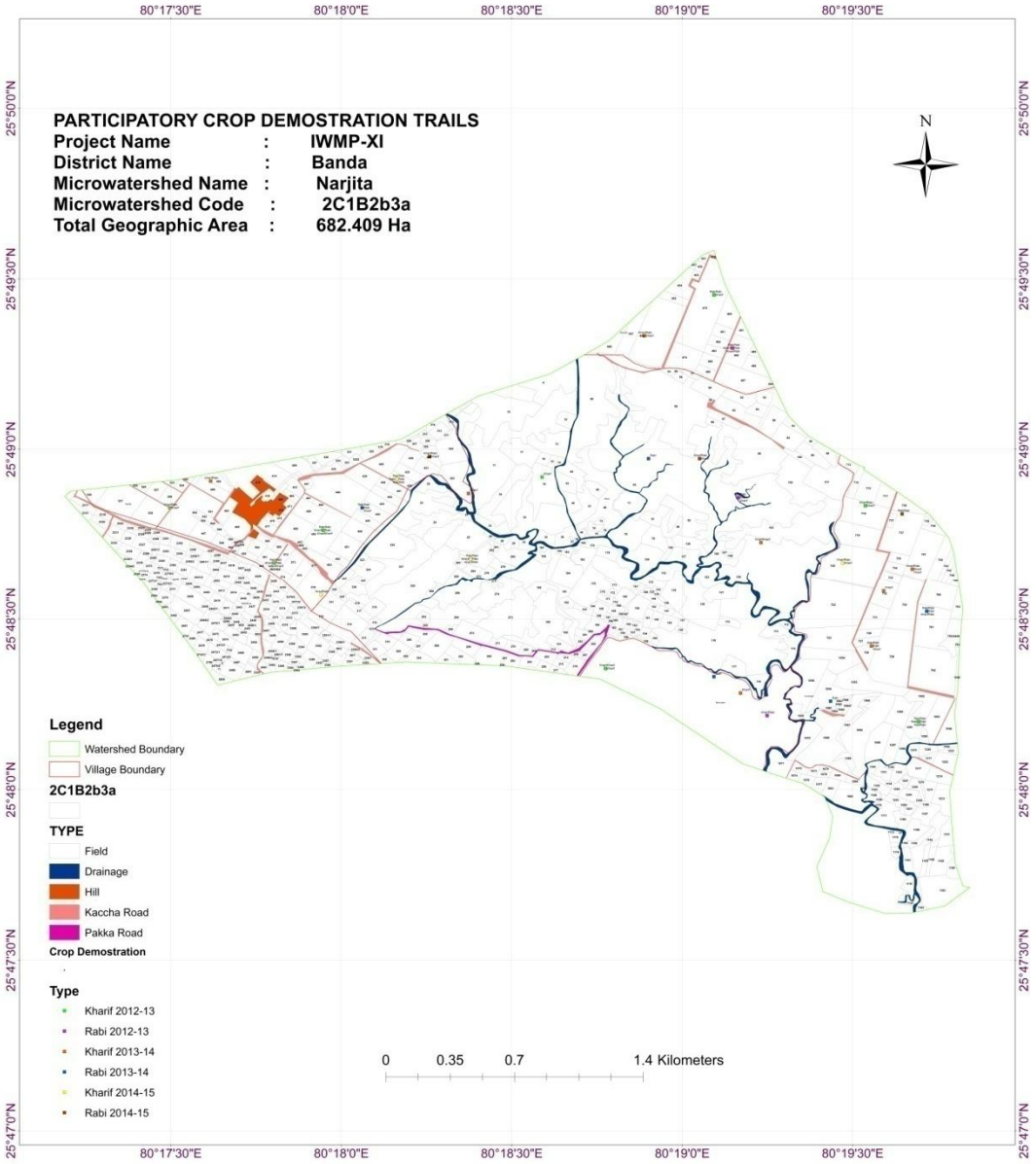
80°21'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gauri Kalan
Microwatershed Code : 2C1B2b2a
Total Geographic Area : 470.38 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2b2a
TYPE
Drainage
Hill
Kaccha Road
NALA
Pakka Road
POND
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0
0.35
0.7
1.4 Kilometers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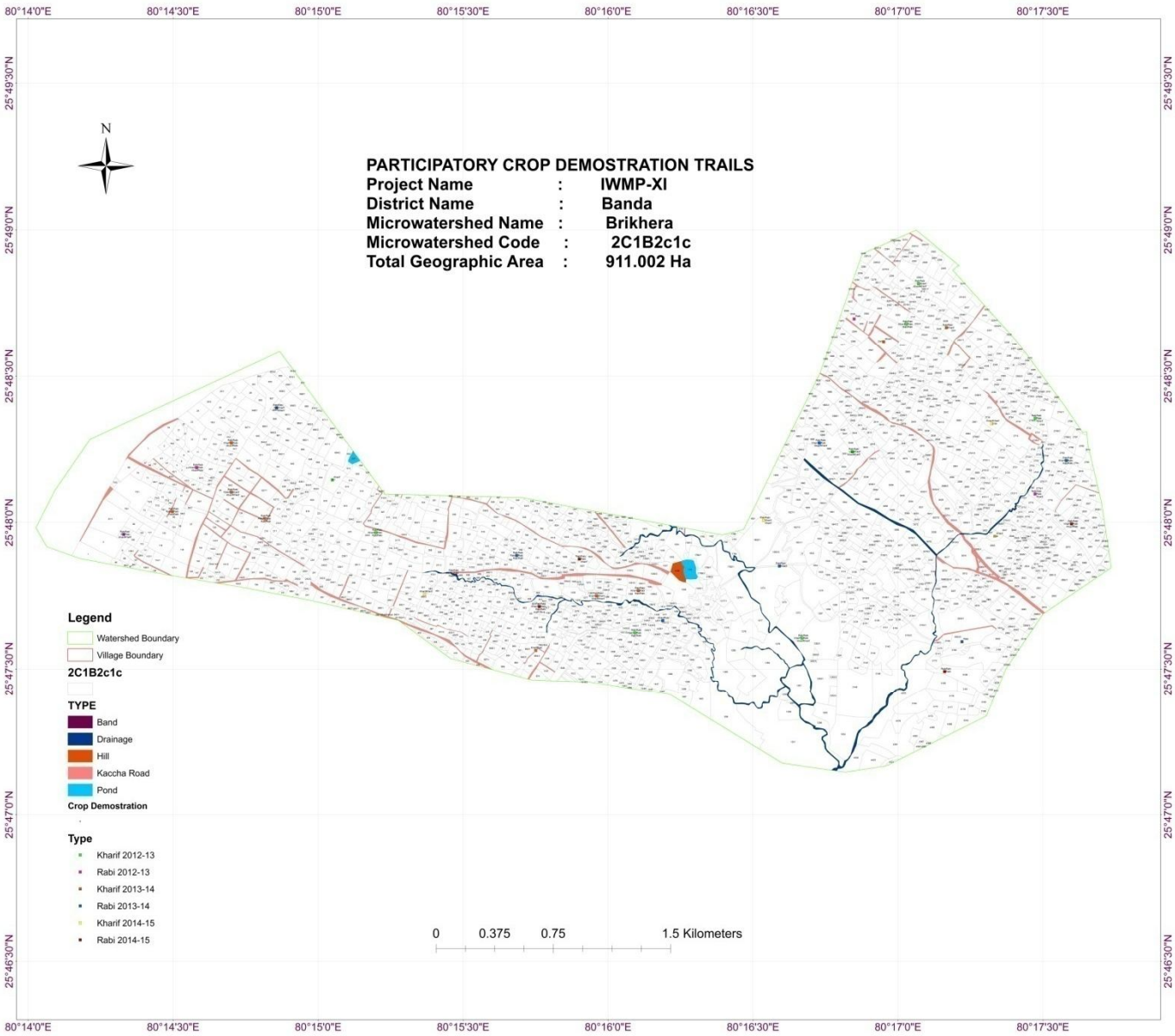
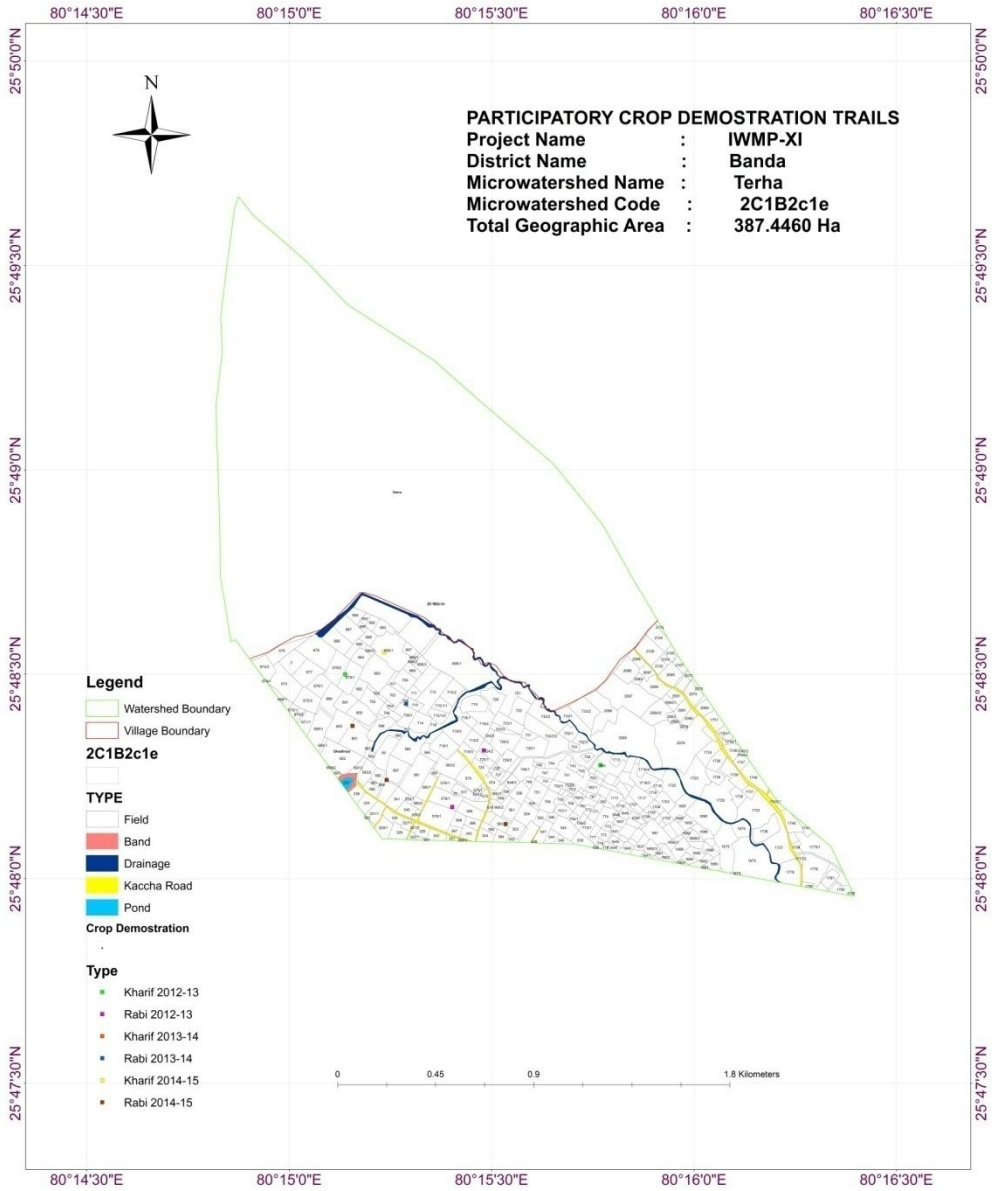
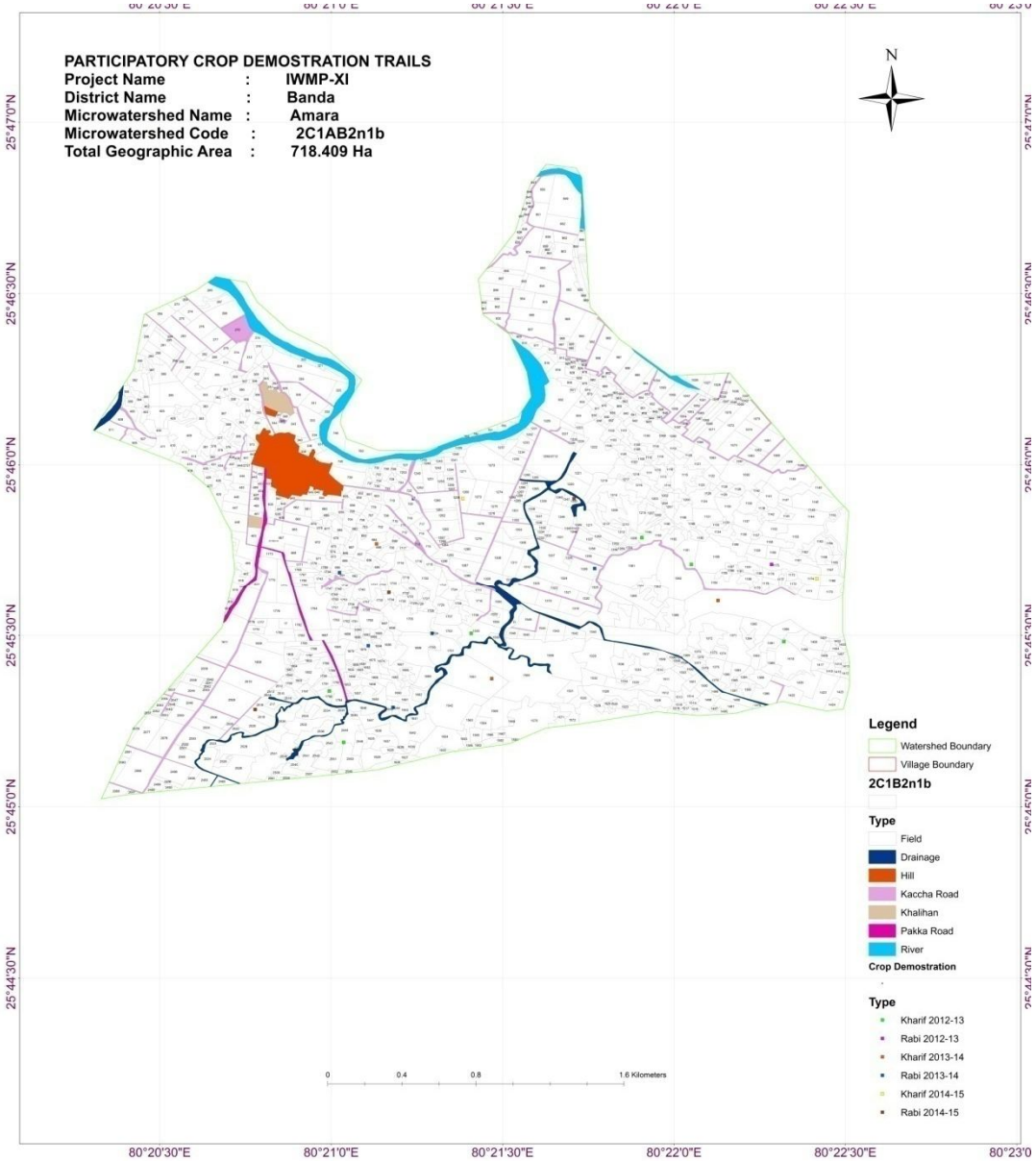
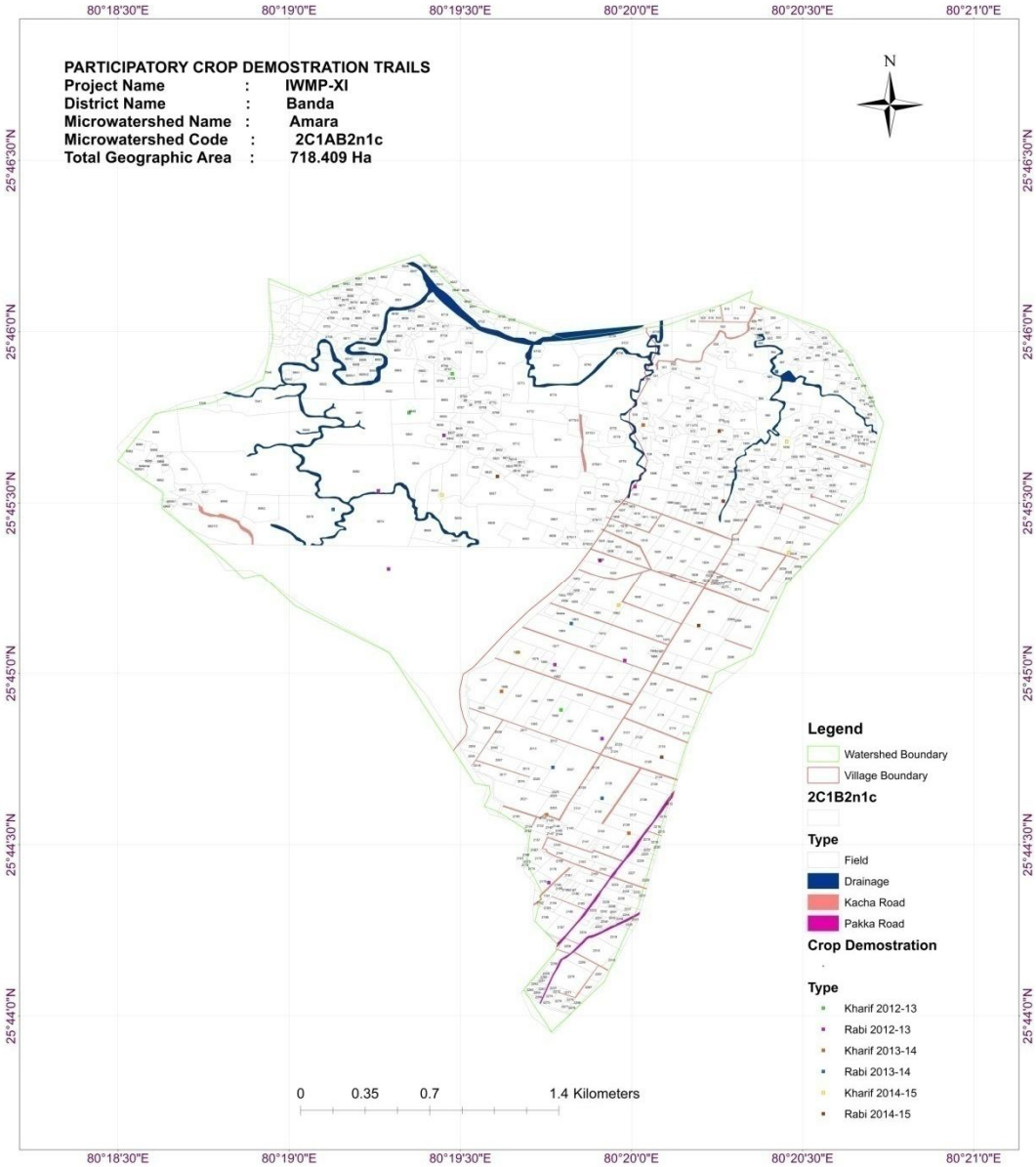
80°18'30"E
80°19'0"E
80°19'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Narjita
Microwatershed Code : 2C1B2b3a
Total Geographic Area : 682.409 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2b3a
TYPE
Field
Drainage
Hill
Kaccha Road
Pakka Road
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0 0.35 0.7 1.4 Kilometers

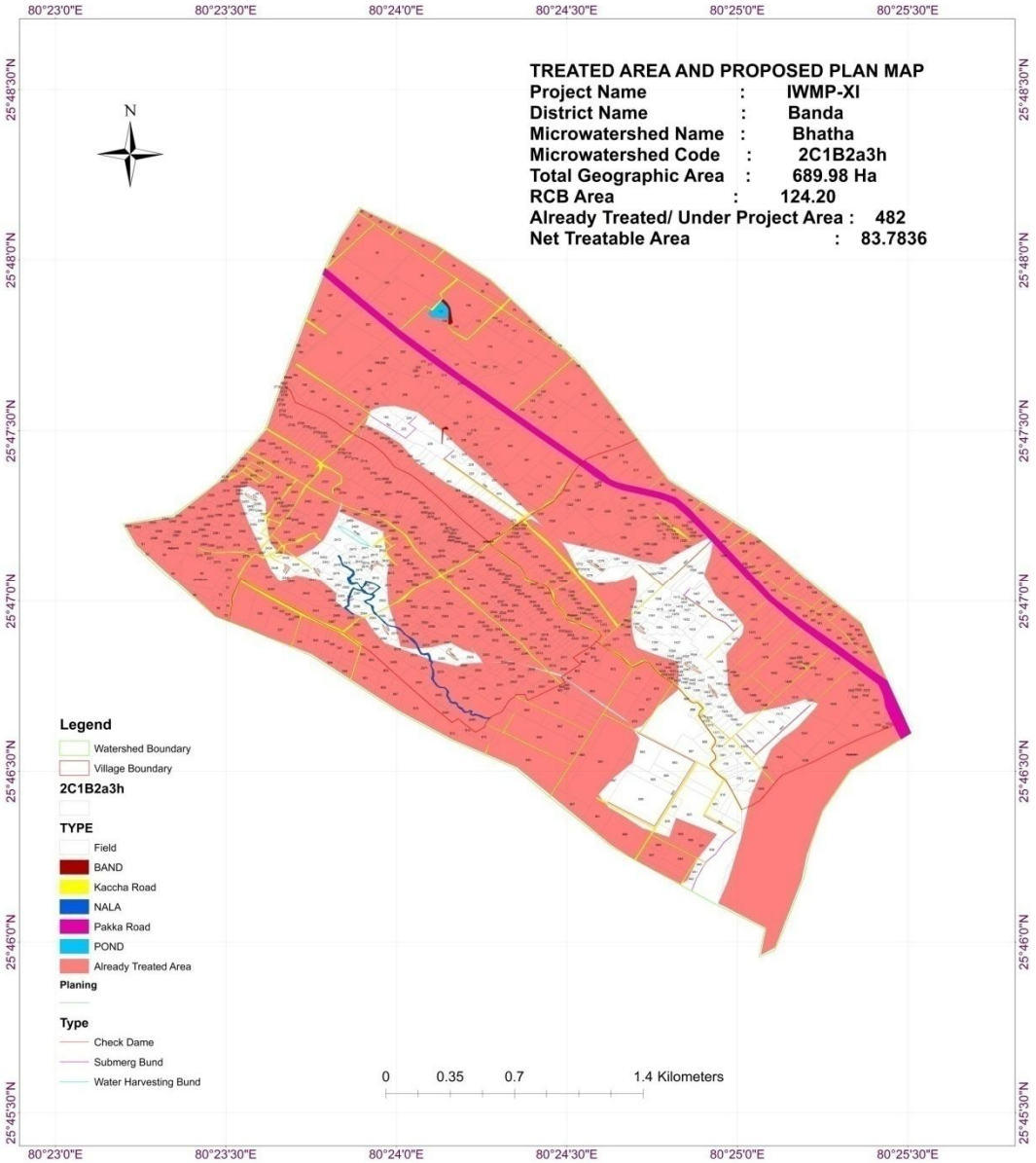

80°14'0"E
80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E
80°17'30"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Brikhera
Microwatershed Code : 2C1B2c1c
Total Geographic Area : 911.002 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2c1c
TYPE
Band
Drainage
Hill
Kaccha Road
Pond
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0
0.375
0.75
1.5 Kilometers

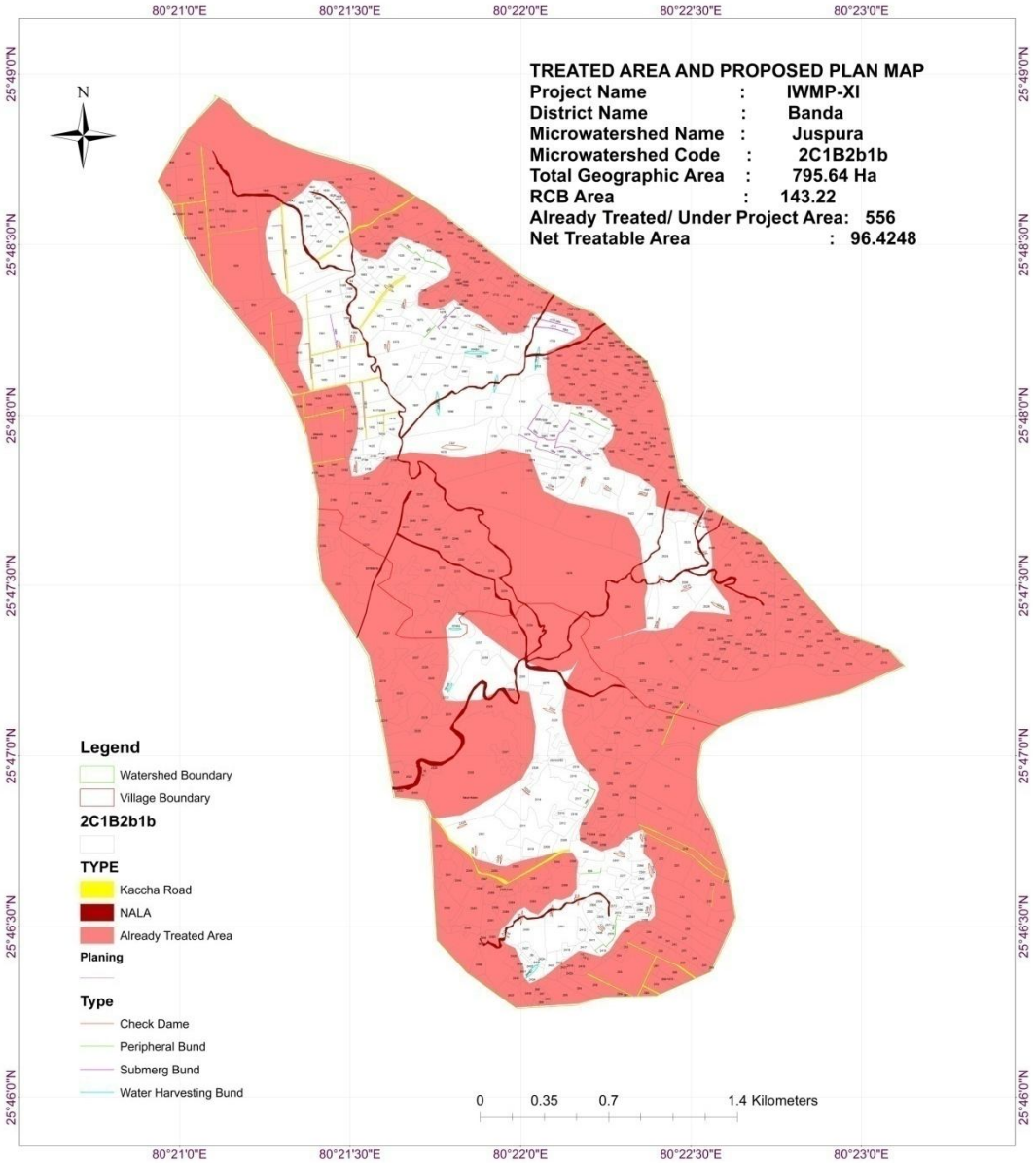

PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gadariya
Microwatershed Code : 2C1B2c1d
Total Geographic Area : 697.068 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2c1d
TYPE
Field
Kaccha Road
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0 0.45 0.9 1.8 Kilometers
25°50'30"N
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
0°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E

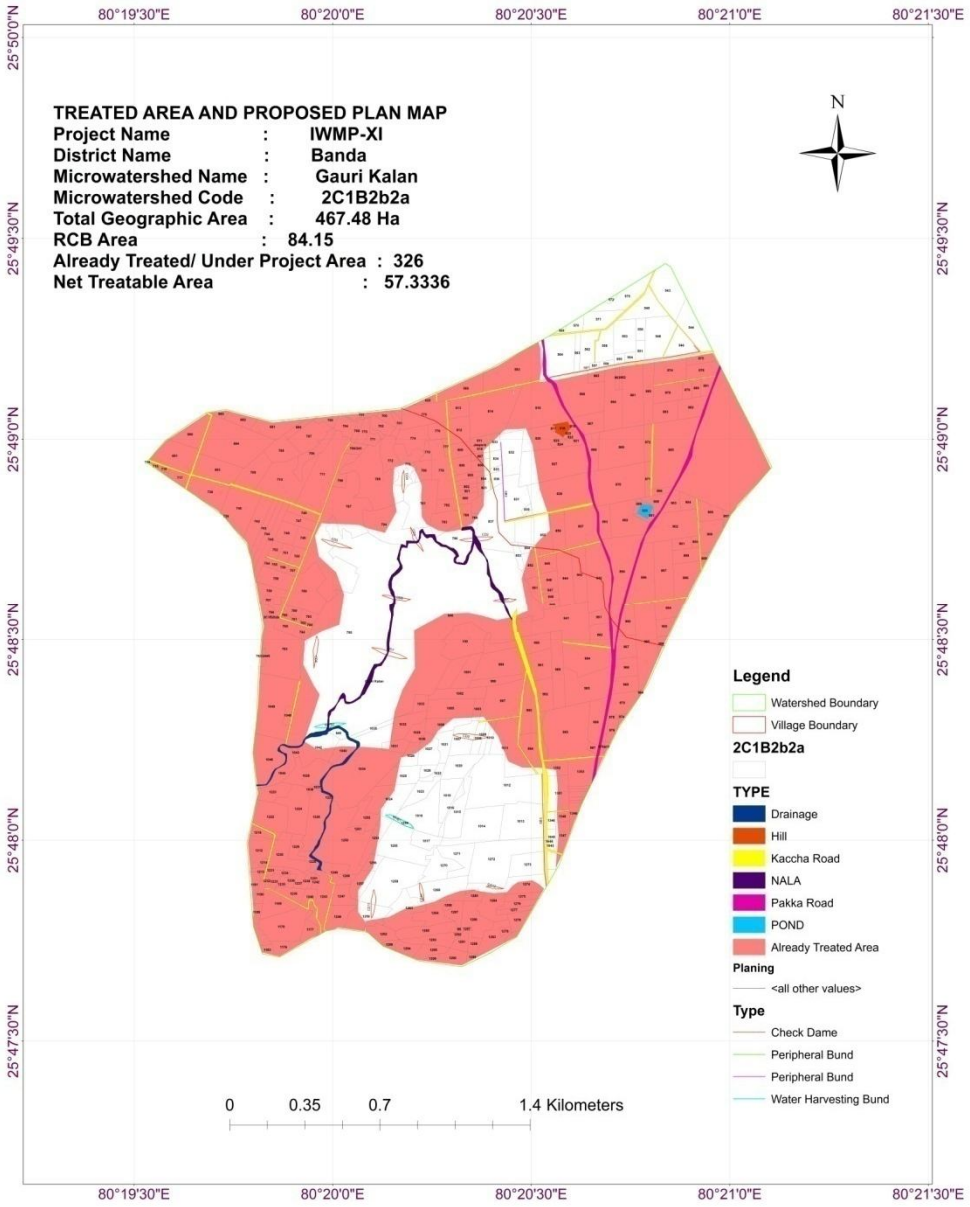

80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Terha
Microwatershed Code : 2C1B2c1e
Total Geographic Area : 387.4460 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2c1e
TYPE
Field
Band
Drainage
Kaccha Road
Pond
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0
0.45
0.9
1.8 Kilometers

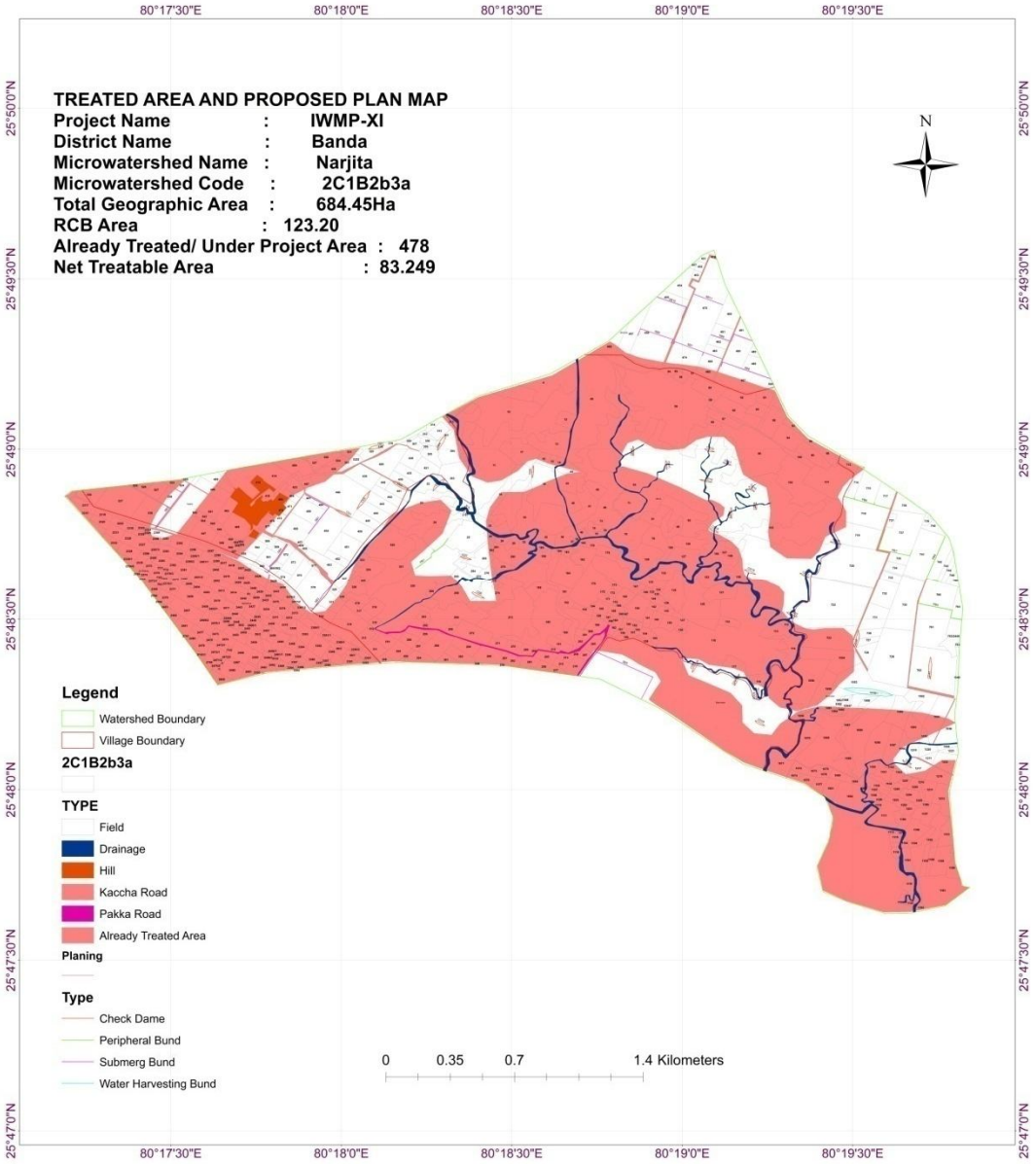

PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Amara
Microwatershed Code : 2C1AB2n1b
Total Geographic Area : 718.409 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2n1b
Type
Field
Drainage
Hill
Kaccha Road
Khalihan
Pakka Road
River
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0 0.4 0.8 1.6 Kilometers
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
80°20'30"E
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E

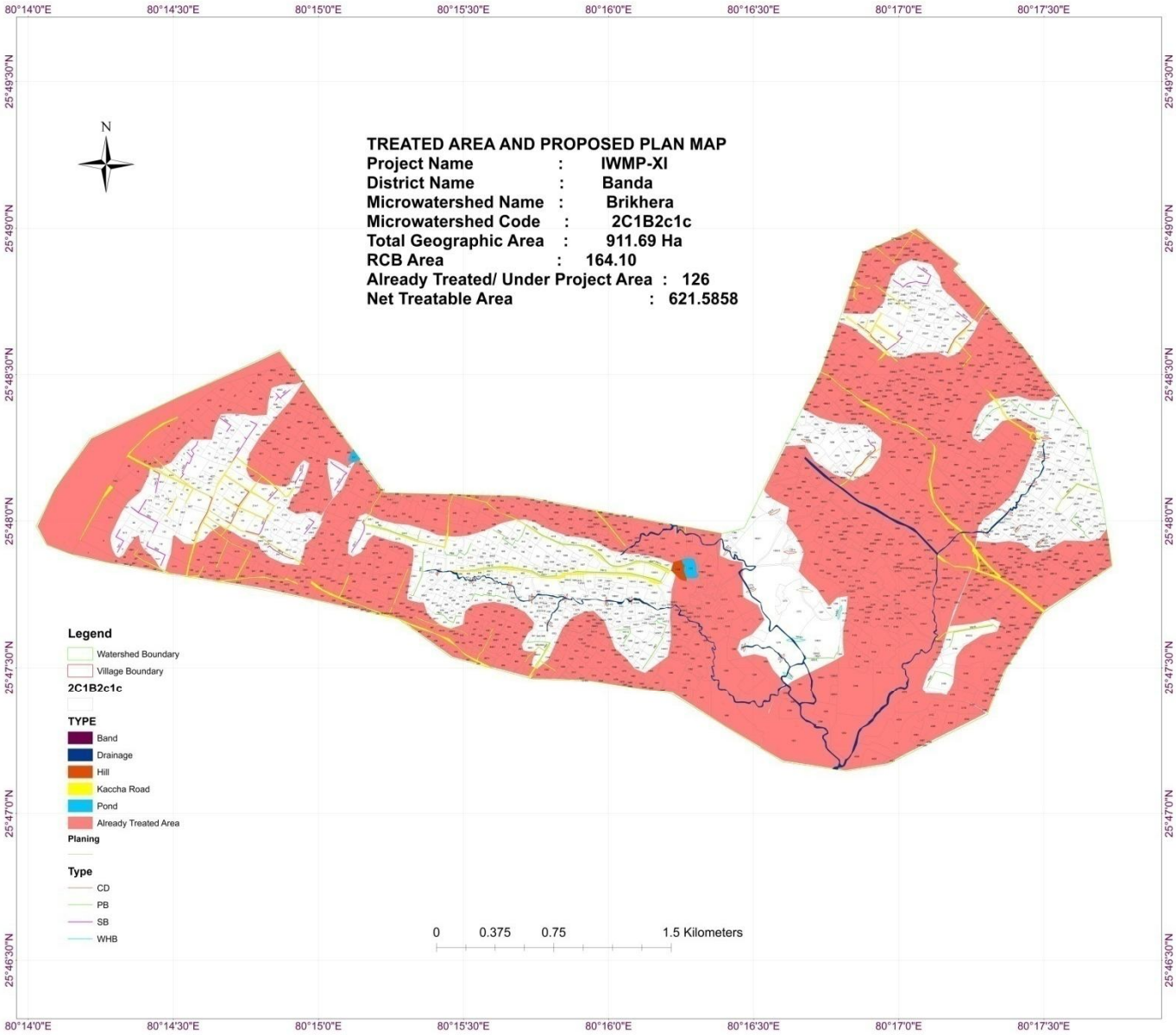

80°18'30"E
80°19'0"E
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
25°44'0"N
PARTICIPATORY CROP DEMOSTRATION TRAILS
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Amara
Microwatershed Code : 2C1AB2n1c
Total Geographic Area : 718.409 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2n1c
Type
Field
Drainage
Kacha Road
Pakka Road
Crop Demostration
Type
Kharif 2012-13
Rabi 2012-13
Kharif 2013-14
Rabi 2013-14
Kharif 2014-15
Rabi 2014-15
0 0.35 0.7 1.4 Kilometers


TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Bhatha
Microwatershed Code : 2C1B2a3h
Total Geographic Area : 689.98 Ha
RCB Area : 124.20
Already Treated/ Under Project Area : 482
Net Treatable Area : 83.7836
N
80°23'0"E
80°23'30"E
80°24'0"E
80°24'30"E
80°25'0"E
80°25'30"E
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
Legend
Watershed Boundary
Village Boundary
2C1B2a3h
TYPE
Field
BAND
Kaccha Road
NALA
Pakka Road
POND
Already Treated Area
Planing
Type
Check Dame
Submerg Bund
Water Harvesting Bund
0
0.35
0.7
1.4 Kilometers

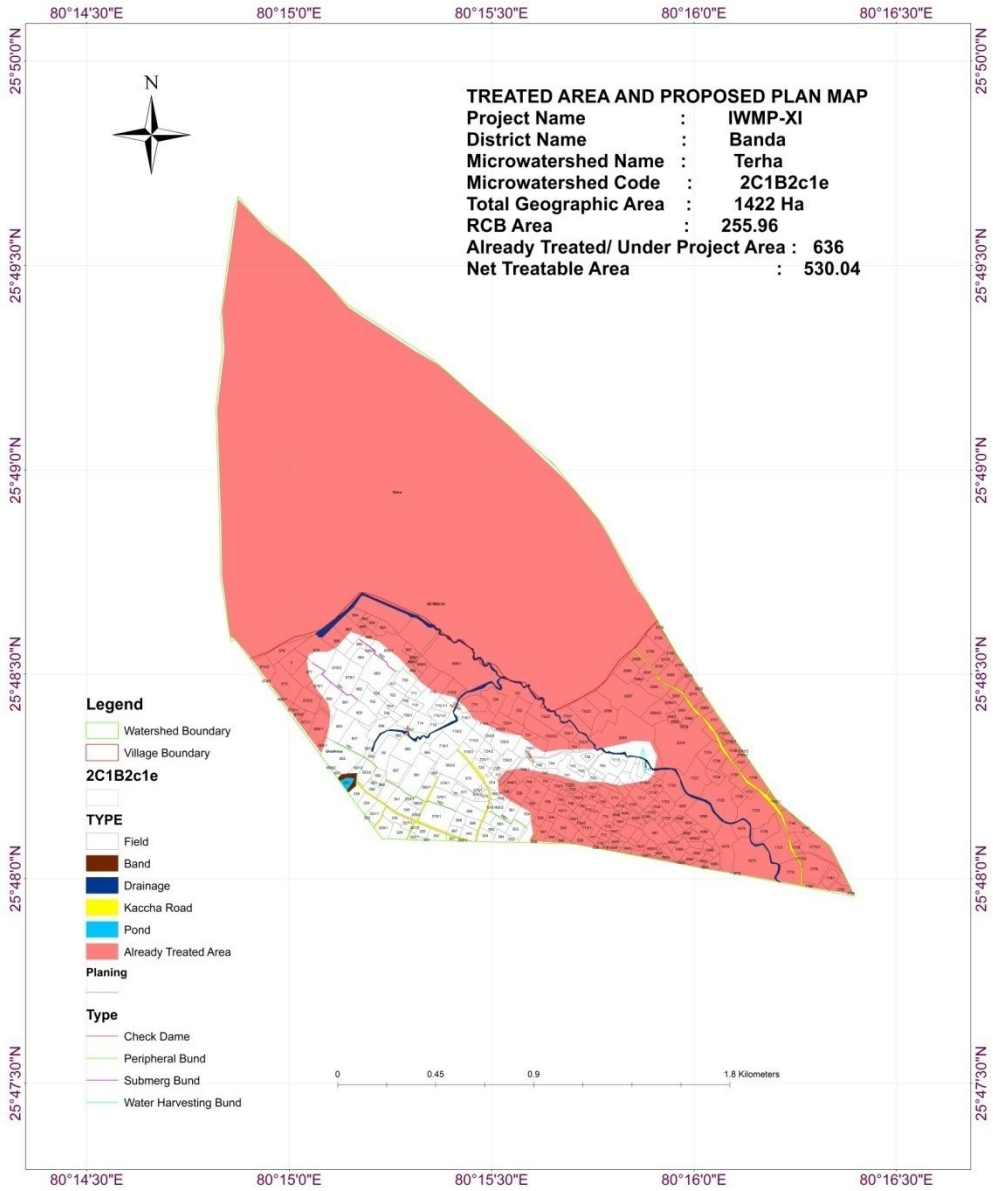

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Juspura
Microwatershed Code : 2C1B2b1b
Total Geographic Area : 795.64 Ha
RCB Area : 143.22
Already Treated/ Under Project Area: 556
Net Treatable Area : 96.4248
N
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E
80°23'0"E
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2b1b
TYPE
Kaccha Road
NALA
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
Water Harvesting Bund
0 0.35 0.7 1.4 Kilometers

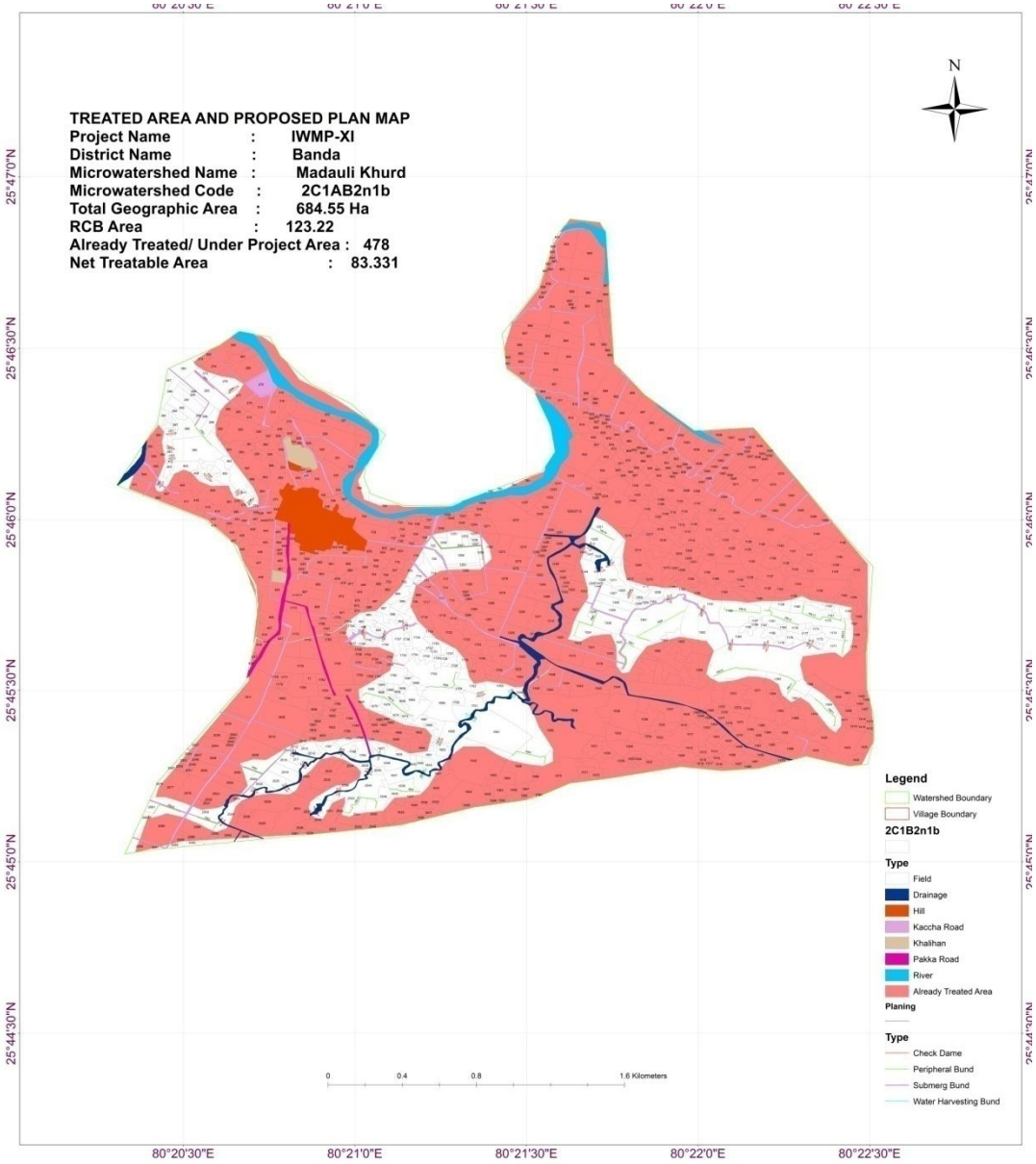

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gauri Kalan
Microwatershed Code : 2C1B2b2a
Total Geographic Area : 467.48 Ha
RCB Area : 84.15
Already Treated/ Under Project Area : 326
Net Treatable Area : 57.3336
N
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
80°21'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
Legend
Watershed Boundary
Village Boundary
2C1B2b2a
TYPE
Drainage
Hill
Kaccha Road
NALA
Pakka Road
POND
Already Treated Area
Planing
<all other values>
Type
Check Dame
Peripheral Bund
Peripheral Bund
Water Harvesting Bund
0
0.35
0.7
1.4 Kilometers

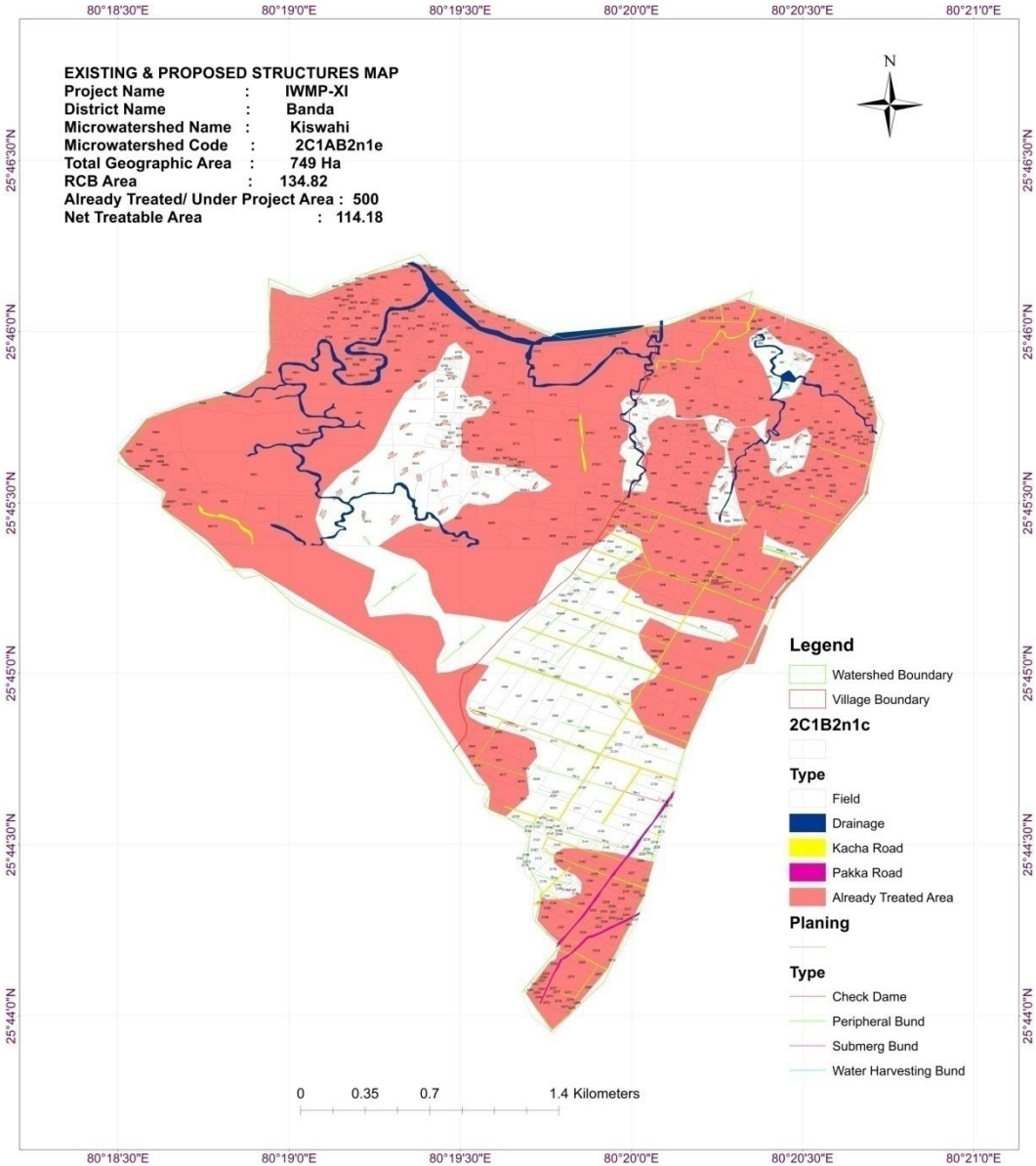

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Narjita
Microwatershed Code : 2C1B2b3a
Total Geographic Area : 684.45Ha
RCB Area : 123.20
Already Treated/ Under Project Area : 478
Net Treatable Area : 83.249
N
80°17'30"E
80°18'0"E
80°18'30"E
80°19'0"E
80°19'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2b3a
TYPE
Field
Drainage
Hill
Kaccha Road
Pakka Road
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
Water Harvesting Bund
0 0.35 0.7 1.4 Kilometers

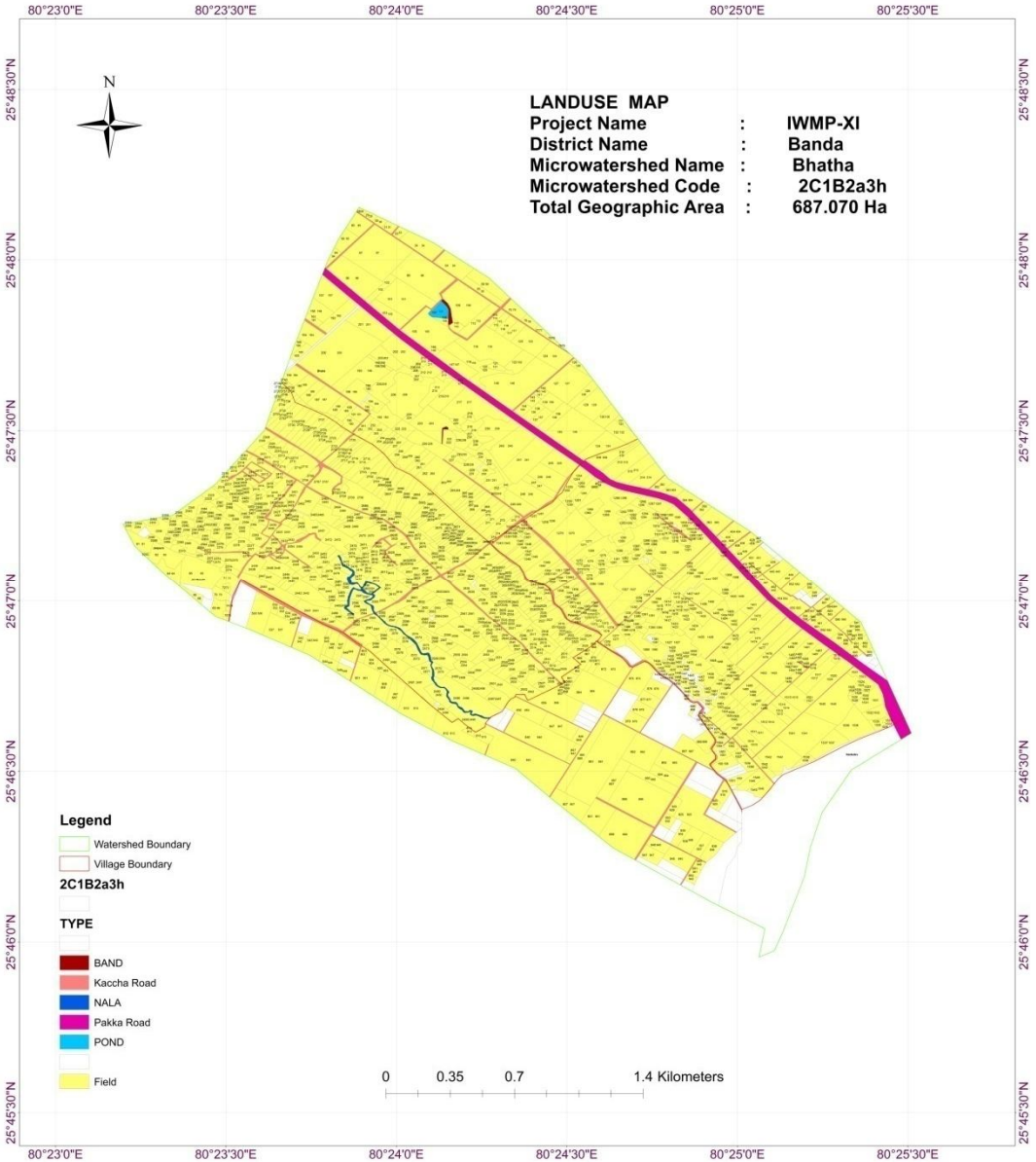

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Brikhera
Microwatershed Code : 2C1B2c1c
Total Geographic Area : 911.69 Ha
RCB Area : 164.10
Already Treated/ Under Project Area : 126
Net Treatable Area : 621.5858
N
Legend
Watershed Boundary
Village Boundary
2C1B2c1c
TYPE
Band
Drainage
Hill
Kaccha Road
Pond
Already Treated Area
Planing
Type
CD
PB
SB
WHB
0 0.375 0.75 1.5 Kilometers
80°14'0"E
80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E
80°17'30"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N

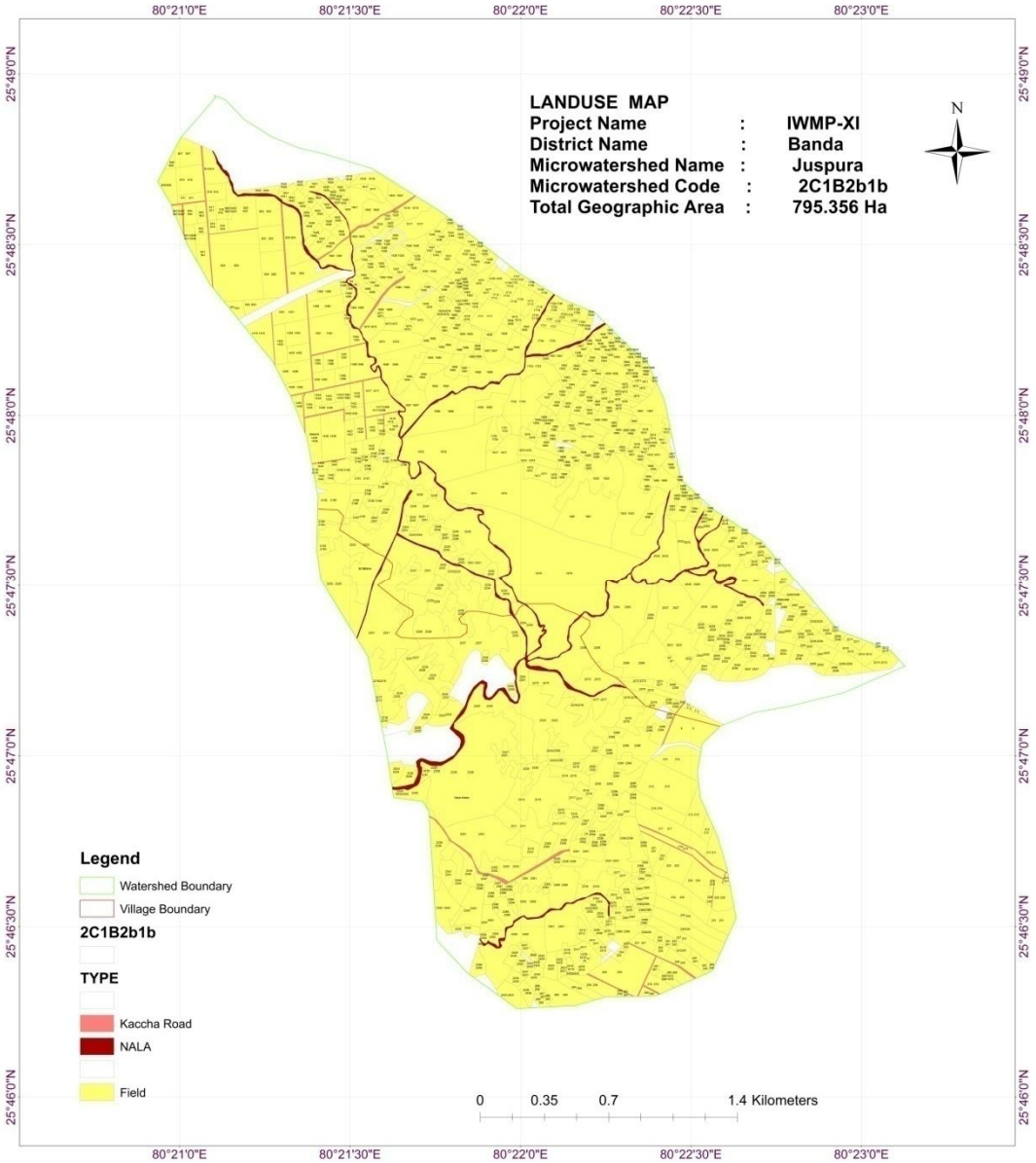

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gadariya
Microwatershed Code : 2C1B2c1d
Total Geographic Area : 199.51 Ha
RCB Area : 35.91
Already Treated/ Under Project Area : 145
Net Treatable Area : 18.5982
N
Legend
Watershed Boundary
Village Boundary
2C1B2c1d
TYPE
Field
Kaccha Road
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
0 0.45 0.9 1.8 Kilometers
25°50'30"N
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
0°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E

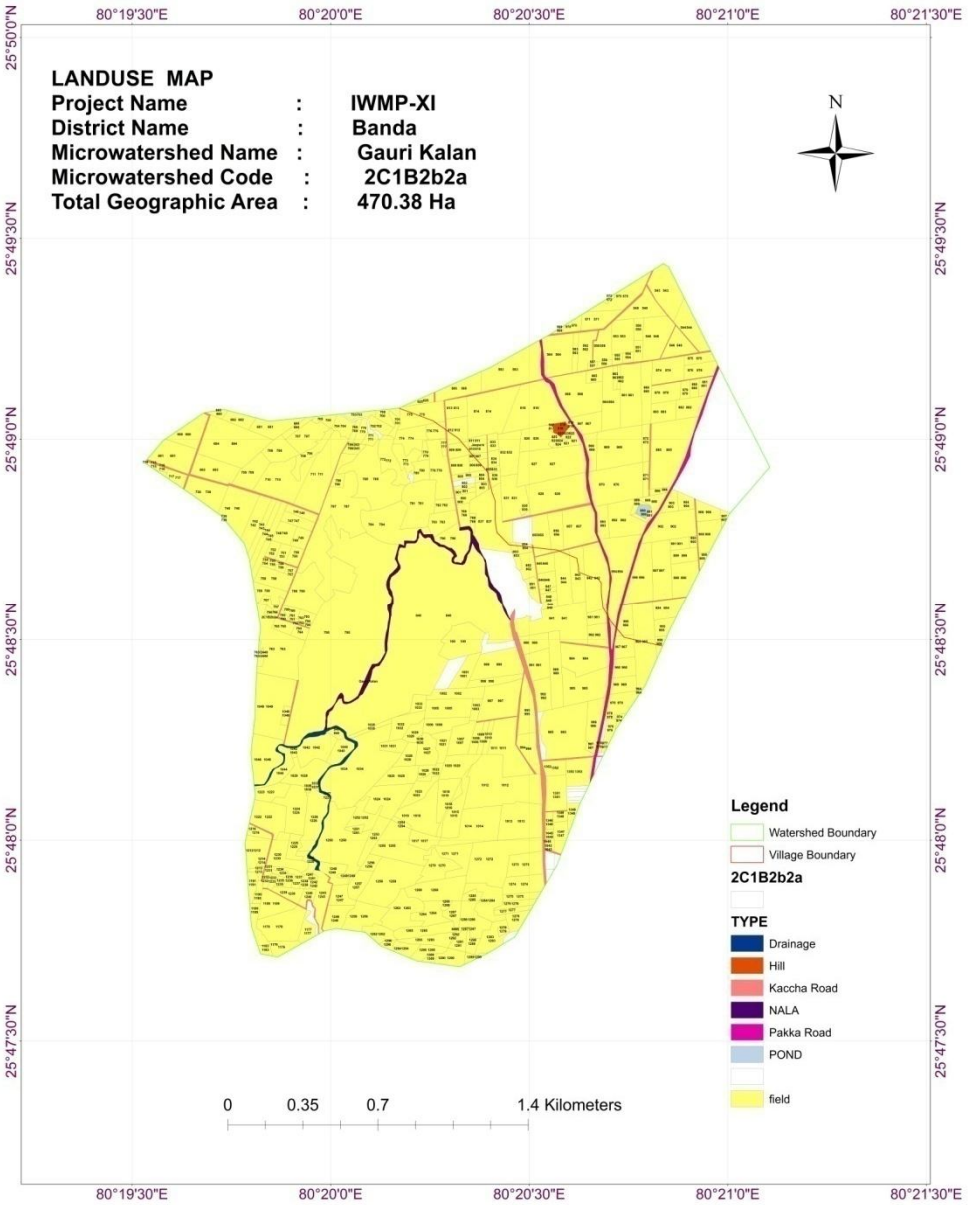

80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
N
TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Terha
Microwatershed Code : 2C1B2c1e
Total Geographic Area : 1422 Ha
RCB Area : 255.96
Already Treated/ Under Project Area : 636
Net Treatable Area : 530.04
Legend
Watershed Boundary
Village Boundary
2C1B2c1e
TYPE
Field
Band
Drainage
Kaccha Road
Pond
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
Water Harvesting Bund
0
0.45
0.9
1.8 Kilometers

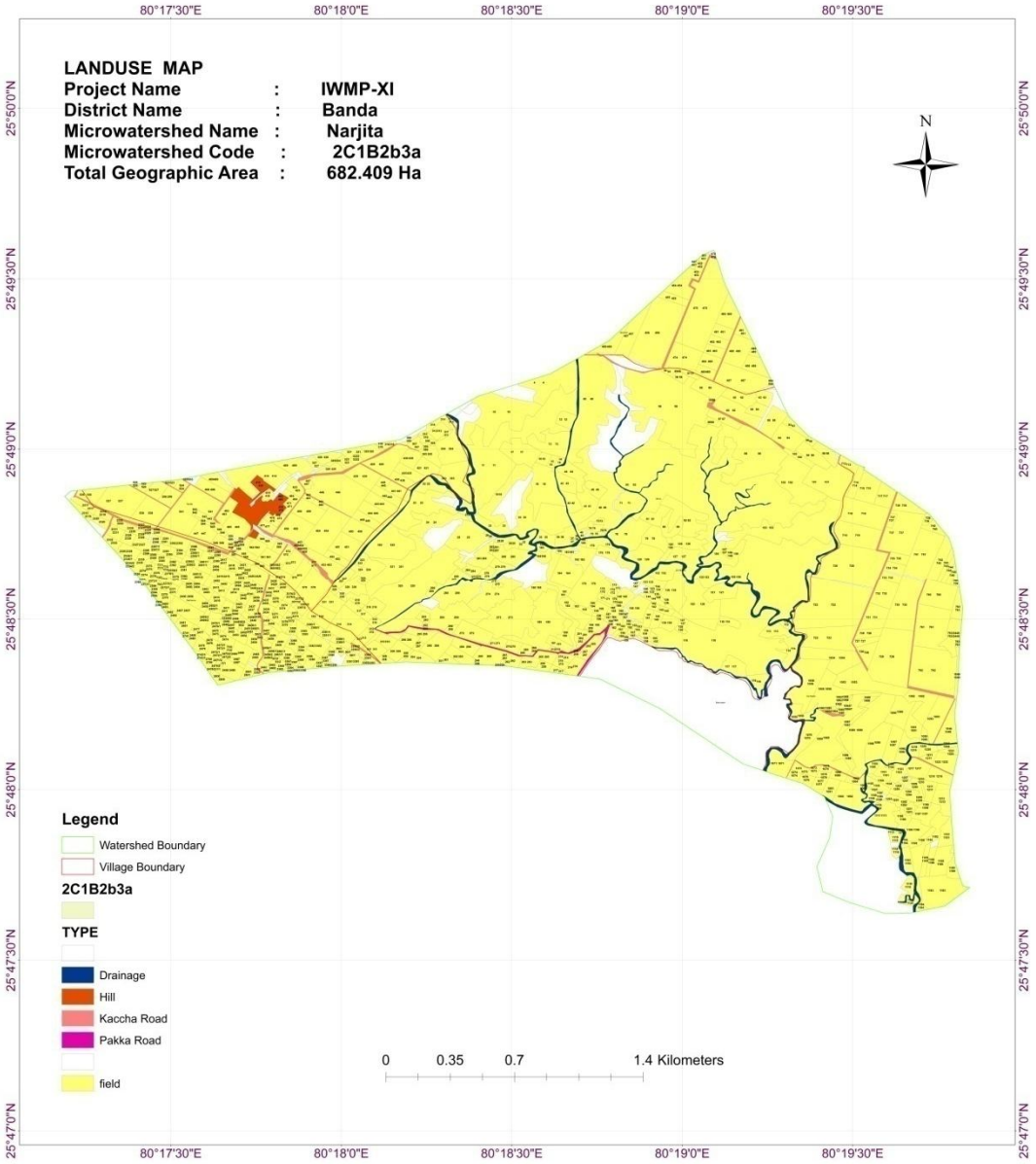

TREATED AREA AND PROPOSED PLAN MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Madauli Khurd
Microwatershed Code : 2C1AB2n1b
Total Geographic Area : 684.55 Ha
RCB Area : 123.22
Already Treated/ Under Project Area : 478
Net Treatable Area : 83.331
N
Legend
Watershed Boundary
Village Boundary
2C1B2n1b
Type
Field
Drainage
Hill
Kaccha Road
Khalihan
Pakka Road
River
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
Water Harvesting Bund
0 0.4 0.8 1.6 Kilometers
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
80°20'30"E
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E

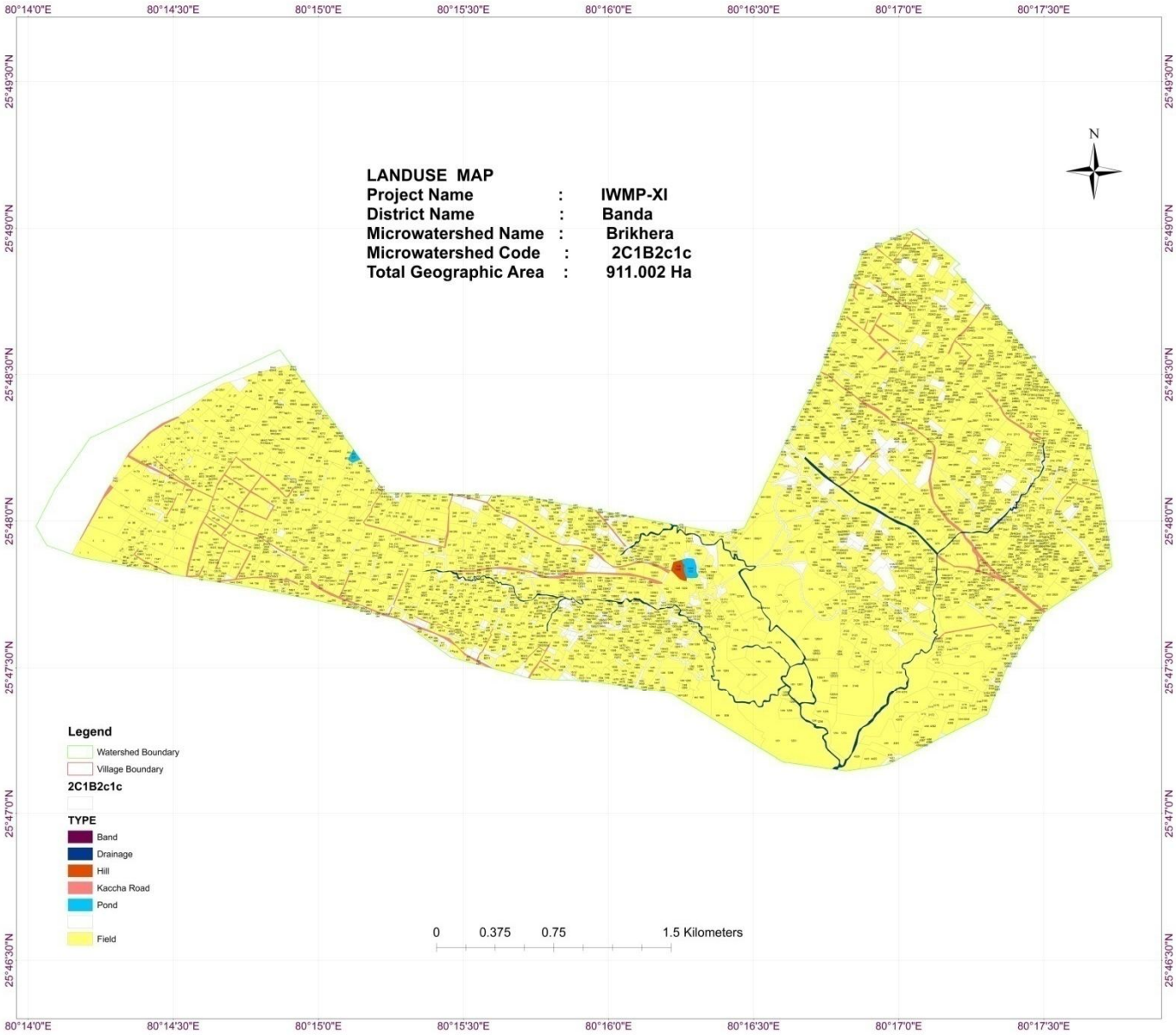

EXISTING & PROPOSED STRUCTURES MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Kiswahi
Microwatershed Code : 2C1AB2n1e
Total Geographic Area : 749 Ha
RCB Area : 134.82
Already Treated/ Under Project Area : 500
Net Treatable Area : 114.18
N
80°18'30"E
80°19'0"E
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
25°44'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2n1c
Type
Field
Drainage
Kacha Road
Pakka Road
Already Treated Area
Planing
Type
Check Dame
Peripheral Bund
Submerg Bund
Water Harvesting Bund
0 0.35 0.7 1.4 Kilometers

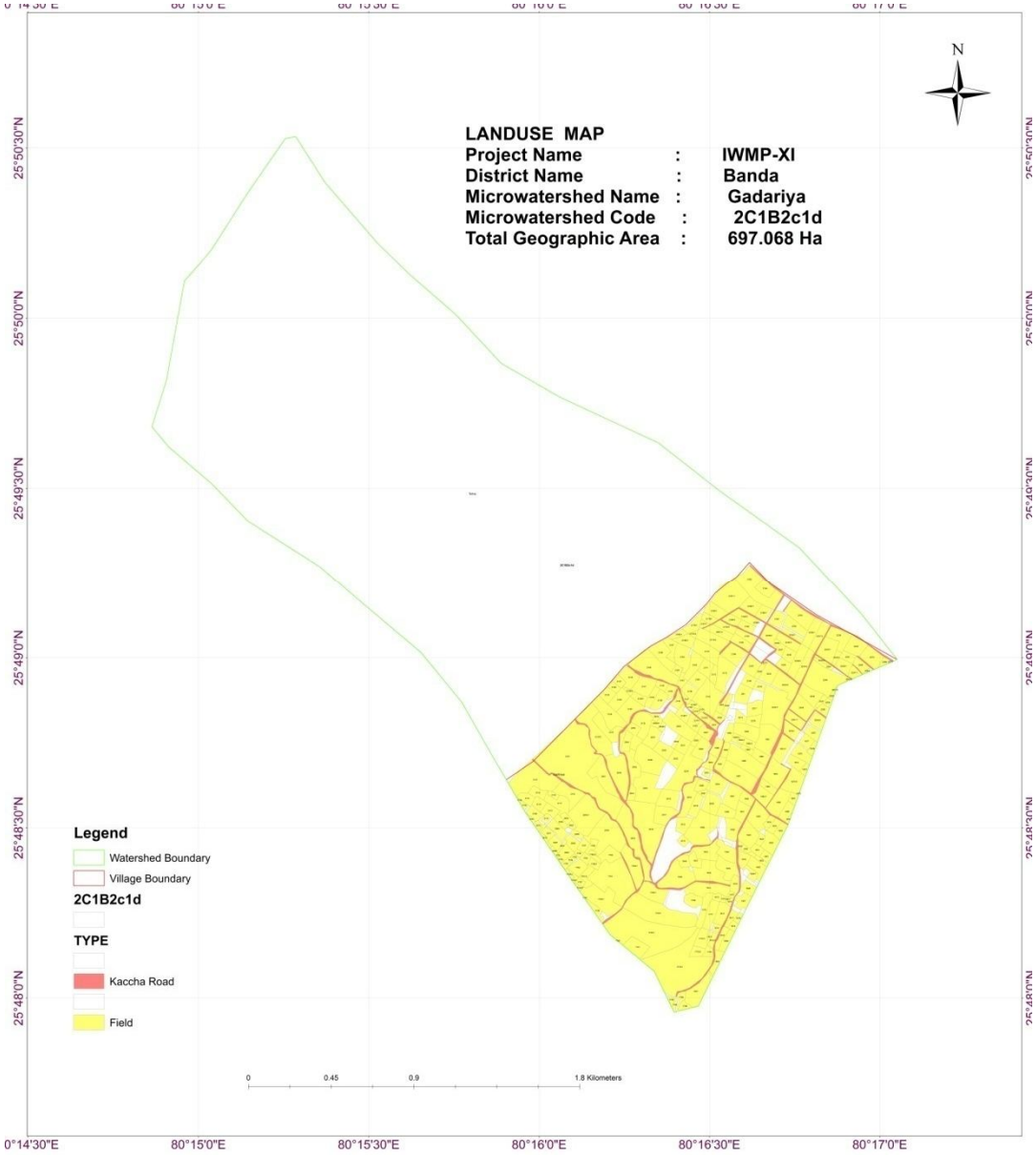

80°23'0"E
80°23'30"E
80°24'0"E
80°24'30"E
80°25'0"E
80°25'30"E
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
N
LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Bhatha
Microwatershed Code : 2C1B2a3h
Total Geographic Area : 687.070 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2a3h
TYPE
BAND
Kaccha Road
NALA
Pakka Road
POND
Field
0 0.35 0.7 1.4 Kilometers

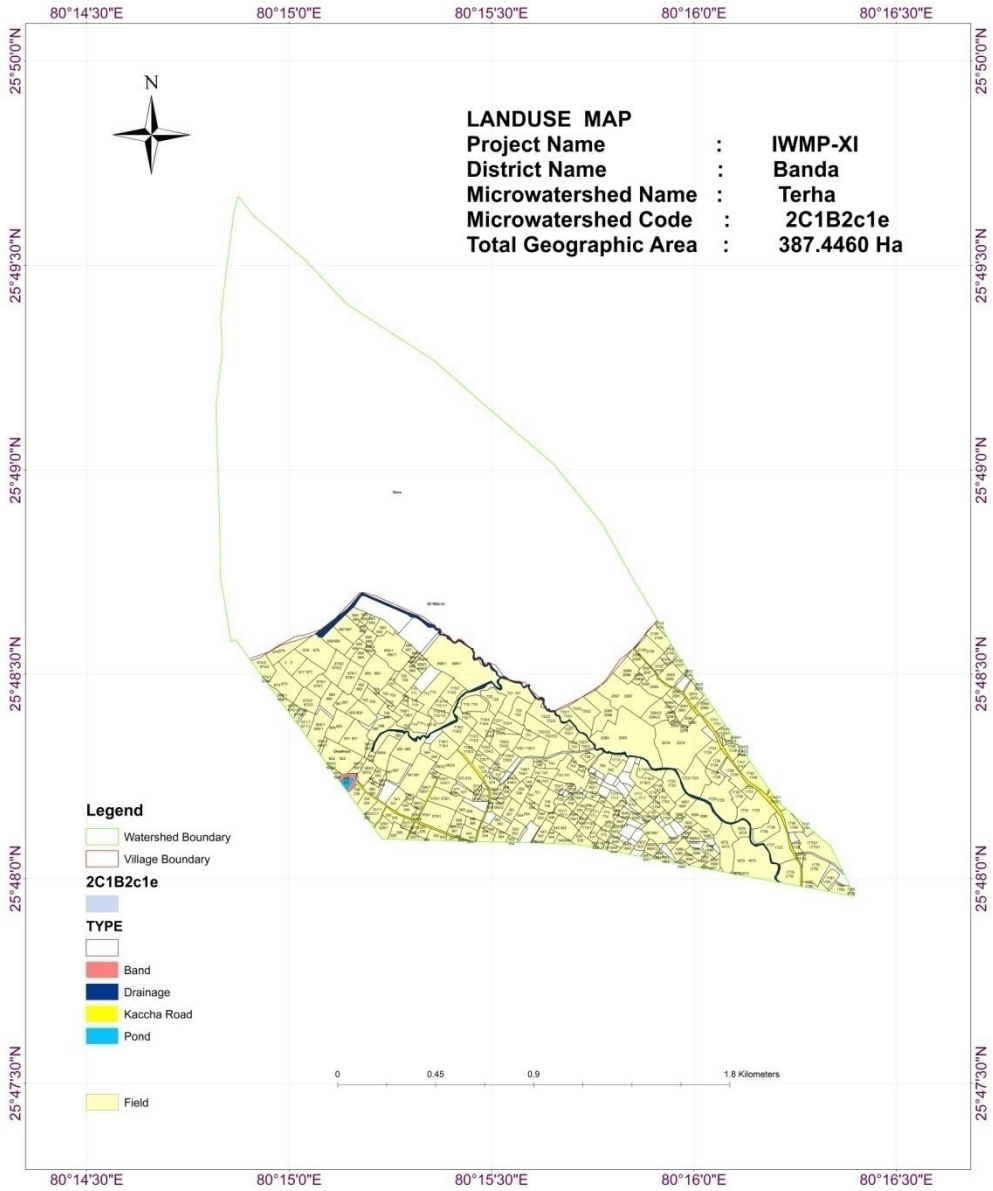

LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Juspura
Microwatershed Code : 2C1B2b1b
Total Geographic Area : 795.356 Ha
N
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E
80°23'0"E
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
25°46'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2b1b
TYPE
Kaccha Road
NALA
Field
0 0.35 0.7 1.4 Kilometers

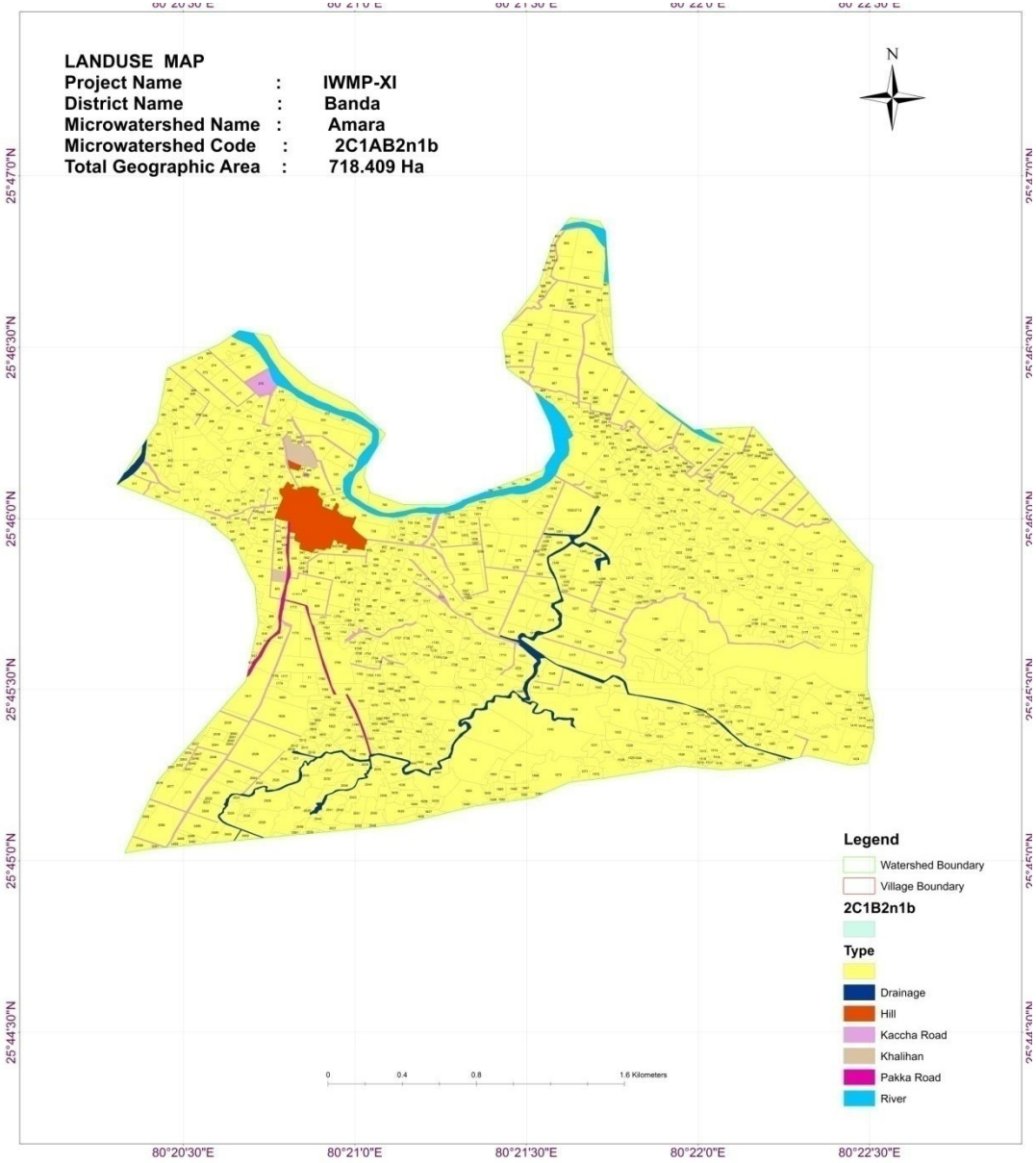

LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gauri Kalan
Microwatershed Code : 2C1B2b2a
Total Geographic Area : 470.38 Ha
N
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
80°21'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
Legend
Watershed Boundary
Village Boundary
2C1B2b2a
TYPE
Drainage
Hill
Kaccha Road
NALA
Pakka Road
POND
field
0
0.35
0.7
1.4 Kilometers

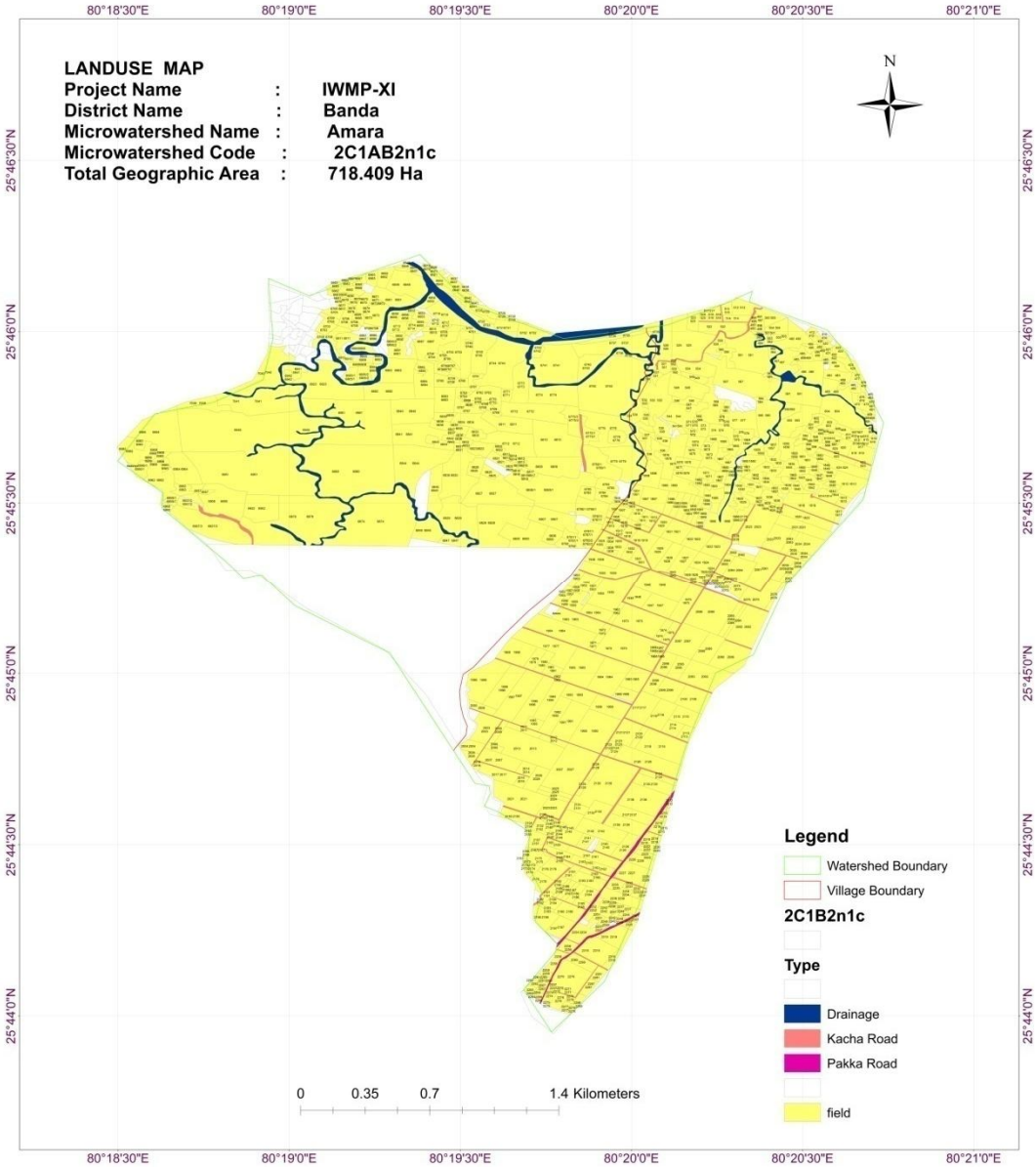

LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Narjita
Microwatershed Code : 2C1B2b3a
Total Geographic Area : 682.409 Ha
N
80°17'30"E
80°18'0"E
80°18'30"E
80°19'0"E
80°19'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2b3a
TYPE
Drainage
Hill
Kaccha Road
Pakka Road
field
0 0.35 0.7 1.4 Kilometers

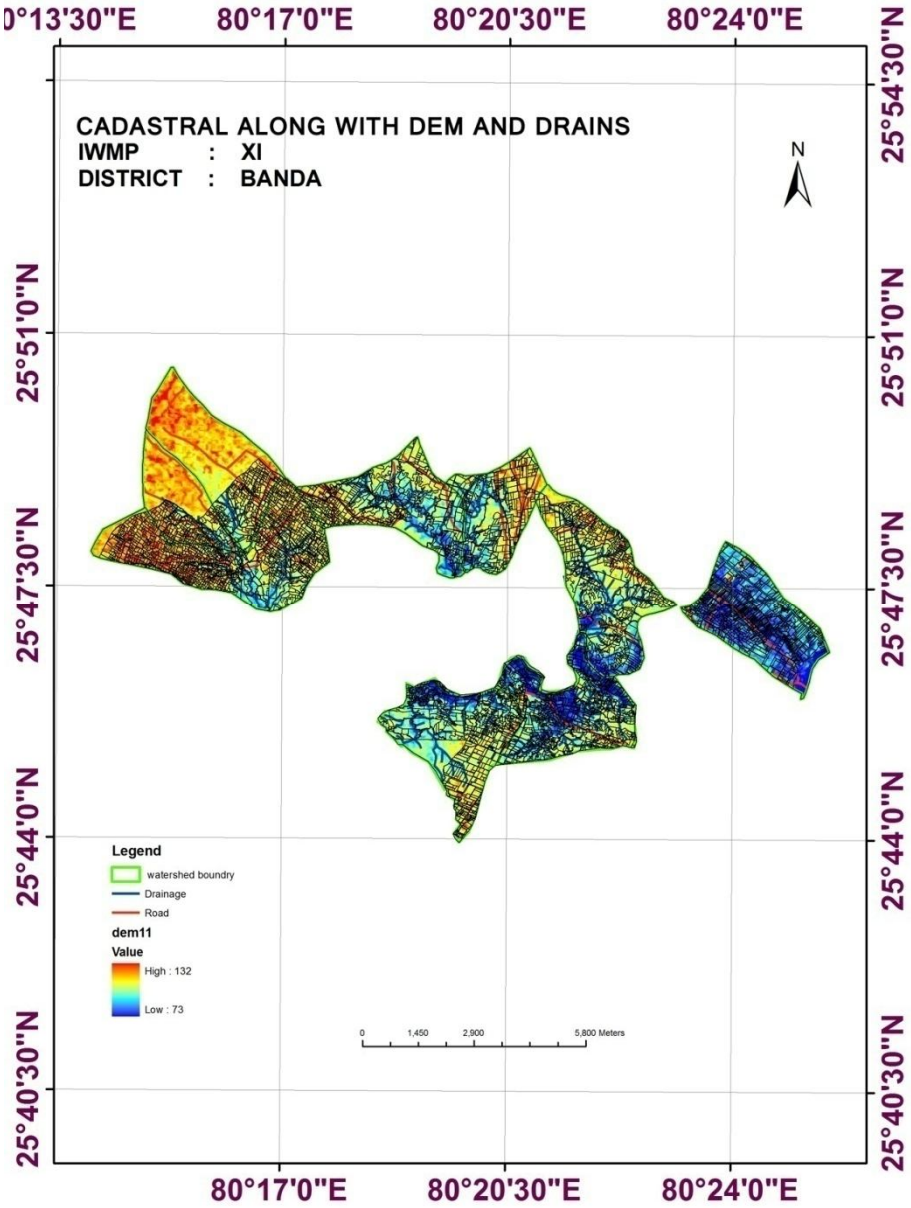

LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Brikhera
Microwatershed Code : 2C1B2c1c
Total Geographic Area : 911.002 Ha
N
80°14'0"E
80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E
80°17'30"E
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
25°47'0"N
25°46'30"N
Legend
Watershed Boundary
Village Boundary
2C1B2c1c
TYPE
Band
Drainage
Hill
Kaccha Road
Pond
Field
0 0.375 0.75 1.5 Kilometers


LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Gadariya
Microwatershed Code : 2C1B2c1d
Total Geographic Area : 697.068 Ha
N
Legend
Watershed Boundary
Village Boundary
2C1B2c1d
TYPE
Kaccha Road
Field
0 0.45 0.9 1.8 Kilometers
25°50'30"N
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
0°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
80°17'0"E


80°14'30"E
80°15'0"E
80°15'30"E
80°16'0"E
80°16'30"E
25°50'0"N
25°49'30"N
25°49'0"N
25°48'30"N
25°48'0"N
25°47'30"N
N
LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Terha
Microwatershed Code : 2C1B2c1e
Total Geographic Area : 387.4460 Ha
Legend
Watershed Boundary
Village Boundary
2C1B2c1e
TYPE
Band
Drainage
Kaccha Road
Pond
Field
0
0.45
0.9
1.8 Kilometers


LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Amara
Microwatershed Code : 2C1AB2n1b
Total Geographic Area : 718.409 Ha
N
80°20'30"E
80°21'0"E
80°21'30"E
80°22'0"E
80°22'30"E
25°47'0"N
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
0
0.4
0.8
1.6 Kilometers
Legend
Watershed Boundary
Village Boundary
2C1B2n1b
Type
Drainage
Hill
Kaccha Road
Khalihan
Pakka Road
River


LANDUSE MAP
Project Name : IWMP-XI
District Name : Banda
Microwatershed Name : Amara
Microwatershed Code : 2C1AB2n1c
Total Geographic Area : 718.409 Ha
N
80°18'30"E
80°19'0"E
80°19'30"E
80°20'0"E
80°20'30"E
80°21'0"E
25°46'30"N
25°46'0"N
25°45'30"N
25°45'0"N
25°44'30"N
25°44'0"N
Legend
Watershed Boundary
Village Boundary
2C1B2n1c
Type
Drainage
Kacha Road
Pakka Road
field
0 0.35 0.7 1.4 Kilometers


0°13'30"E
80°17'0"E
80°20'30"E
80°24'0"E
25°54'30"N
25°51'0"N
25°47'30"N
25°44'0"N
25°40'30"N
CADASTRAL ALONG WITH DEM AND DRAINS
IWMP : XI
DISTRICT : BANDA
N
Legend
watershed boundry
Drainage
Road
dem11
Value
High : 132
Low : 73
0
1,450
2,900
5,800 Meters